



PRE-PRIMARY MATHEMATICS

Teaching Guide for Level C

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Introduction

The New Syllabus Pre-Primary Mathematics teachers' guide complements the main textbooks to provide additional prompts and activities for the teachers, serving as a guide to better enhance the teaching of new concepts to pupils in a fun and engaging way.

Some common guidelines for the guide are:

Scheme of work

A proposed scheme of work that provides an approximate for the amount of time to be spent on each activity, is included as an overview plan. The actual amount of time required for pupils to achieve full understanding of the learning objectives of each activity may vary according to the abilities of the pupils and the additional activities that may be implemented.

Numbers

Numbers are used for various purposes, such as counting and measuring, and can often be seen in the world around us. As such, it is important that pupils are introduced to basic math and number concepts. The early development of number awareness also sets the foundation for the learning of more advanced mathematical concepts.

Checking pupils' work

Check that the pupils have completed the activity correctly.

Let's revise

Revision is the process of looking back at learnt concepts and is an essential part of the learning process as it allows pupils to check their understanding of these concepts. It also reinforces the learning of mathematics by enabling pupils to identify gaps in their knowledge and hence keep track of their own learning progress.

An introduction at the beginning of every unit stresses to teachers the importance of each unit and the concepts to be covered.

Pre-assessment activities at the start of each unit serve as a springboard to revise previous concepts and ease pupils into the learning of new concepts.

A screenshot for each lesson provides a visual representation and a quick reference for teachers to the specific page.

Each unit comprises 8 lessons, introducing new concepts gradually by building on pupils' existing knowledge.

Suggested duration helps teachers plan for lessons that may take a longer time.

Key learning objectives for each lesson are presented.

A checklist of Required resources helps teachers prepare materials needed for the lesson.

Key terms are highlighted.

Introduction
Colours play a significant role in our daily lives as we use colours to identify and differentiate objects.
In this unit, pupils are introduced to colours that they commonly encounter. Pupils are also required to recognize common objects and animals, as well as colour them accordingly, which allows them to associate colours to common objects and animals. By the end of the unit, pupils should be able to recognise the names of the various colours, and to match and colour objects or pictures according to given criteria.

Pre-assessment activity
• Show pupils flashcards with pictures of a chick, a banana, a sun and a school bus. Show flashcards one at a time and ask pupils to name each object. After this, place the flashcards on the board. Once all the four flashcards are in place, ask pupils how the different objects are similar. Pupils should be able to answer that the objects are the same colour, but pupils may not be able to name the colour, i.e. yellow.
Repeat the above activity to teach red and blue using flashcards of apple, strawberry, the engine, and heart for red and sea, blueberry, bluebird, and blue whale for blue.

1.1 Colours

Suggested duration:
30 minutes

Objectives
Introduce primary colours.

Required resources
• flashcards (yellow, red or blue objects)
• Additional:
Colouring worksheets

Key terms
chick yellow
apple red
sea blue

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Introduction

Introductory activity serves to propel pupils into the knowledge of new concepts before the lesson is covered.

This activity may allow for the assessment of the pupils' understanding of a topic as well as their mastery of the learning objectives for the activity.

Colours

- Show flashcard with picture of chick and ask pupils for the colour of the chick. Explain that the chick is yellow. Place flashcard on the board and write the word 'yellow' above flashcard. Ask pupils to point and identify objects around them that are yellow.
- Repeat this with flashcards of an apple and the sea to teach red and blue. Revise by pointing to each flashcard and repeating the statements 'The chick is yellow.', 'The apple is red.', and 'The sea is blue.' respectively.

Show the different flashcards used in the pre-assessment activity and ask pupils to name the colour of the object in each flashcard.
Ask pupils to think of some other objects that are yellow, red or blue and name them.

Activity 1.1

- Ask pupils to take out their coloured pencils or crayons.
- Point to the picture of the chick in Activity 1.1 and ask pupils to read the statement 'The chick is yellow.'

Ask the pupils to find and hold up a yellow coloured pencil, and to colour the chick. Repeat this for the pictures of the apple and the sea.

Additional activities

1. Show and tell

Ask pupils to go home and find an object that is yellow, red or blue. Ask them to bring the object to class the next day.

Ask pupils to carry out a show and tell session using the objects that they have brought. Each pupil should present the object they have brought from home and tell the name and the colour of the object.

Note: This may be carried out with the show and tell activities from Unit 1.2 and Unit 1.3.

2. Mastery

Give pupils colouring worksheets or pages that show pictures of common objects that are yellow, red or blue. The pictures on the flashcards may also be used.

Review the pictures on the worksheets with pupils by asking them to name each object and its colour.

Ask pupils to colour the pictures accordingly.

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Additional activities allow pupils to further explore the concepts taught in the lesson.

Activity 4 provides practice for pupils to further consolidate the concepts and includes suggested worksheets that teachers may create to test the pupils' ability to understand the concepts taught.

Activity 2

- Ask pupils to identify the different numbers and objects shown in Activity 5.1. Read the sentences, 'Sania enjoys a hearty breakfast. It is the first meal of the day.' If necessary, explain the meaning of hearty breakfast. Ask questions to make sure pupils understand the context.
- Read the first line of the instructions, 'Serve Sania 2 eggs, 2 sandwiches and 3 sausages.' Ask pupils to identify and count each food item.

Read the second line of the instructions, 'Colour the food on her plate.' Ask pupils to point to Sania's plate and to colour the food.

- Ask pupils to count how many food items are on Sania's plate altogether.
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 7 by tracing the dotted lines.

Additional activities

Activity 3

- Explain the importance of eating breakfast and ask pupils what they usually eat for breakfast.
- Pupils should take turns to share their answers with their classmates.

Activity 4

- Divide the class into groups of 4 or 5. Give each group a sheet of drawing paper.
- Ask them to draw the number 7 and to colour and decorate it.
- As they do this, ask them to think of their favourite food item and to draw 7 of that item around the number 7.
- Groups should show their drawings to the class and to talk about them. Display the drawings in the classroom so that pupils can familiarise themselves with the number 7.

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Activity 2 out of 4 activities provides a guide to allow pupils to understand and derive the answers in the textbook.

Activity 3 provides pupils the opportunity to discuss opinions and real-life situations related to the lessons, to improve pupils' awareness of the lessons.

New Syllabus

PRE-PRIMARY MATHEMATICS TEACHING GUIDE

C1



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Introduction

In this unit, pupils are required to look back at the concepts they learned in the previous book before they start to learn new concepts. By the end of the unit, pupils should be able to apply learnt concepts with accuracy and confidence.



Pre-assessment activity

- Revise with pupils the activities they carried out in the previous term.
- Use flashcards to revise: numbers to 20, odd and even numbers, and number bonds of 4 – 10.



1.1 A trip to the farm



Suggested duration

40 minutes

Objectives

- Write numbers 11 to 20 in words.

Required resources

- worksheet to match numbers to their names

Key terms

farm

Write numbers 11 to 20 in words

Activity 1

- Revise writing the number words from eleven to twenty.
- Go through the numbers in sequence, and then in a random order, asking pupils to spell the words.

Activity 2

- Ask pupils to describe the picture in Activity 1.1.
- Read the statement, 'It's a bright, sunny day. Let's visit the farm.'
- Read the instruction, 'Trace the number word on each cloud.'
- Point to the first cloud and ask pupils to read and spell out the word.

- Ask them to trace the word with a finger before tracing it in pencil.
- Repeat for all the other number words.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have been to a farm.
- Ask pupils to share their experiences of the farm.

Activity 4

- Give pupils Worksheet 1 and ask them to draw lines to match the numbers and number words.

1.2 Children at the farm



Suggested duration

40 minutes

Objectives

- Recognize number words and their corresponding numbers.

Required resources

- flashcards of numbers 11 to 20
- flashcards of number words
- Additional:
flashcards of numbers 11 to 20
flashcards of number words

Key terms

bus
farm

Recognizing number words and their corresponding numbers

Activity 1

- Scatter on a table a set of cards numbered 11 to 20 and a set of corresponding number word cards.
- Ask 10 pupils to take turns to match one number card to the corresponding number word card. The pairs should be found in sequence and placed side by side on the board.
- Repeat the activity 2 or 3 times to enable each pupil to take part.

Activity 2

- Ask pupils to describe the picture in Activity 1.2.
- Read the statement, 'The children are taking the bus to the farm.'

- Read the instruction, 'Fill in the missing numbers and number words.'
- Explain that the pupils should read the given number word and write the number on the card, or read the number and write the number word below.
- Complete the first two tasks together, asking pupils to write the target number in the air or spell out the target word before writing it.
- Pupils should complete the rest of the activity themselves.

Additional activities

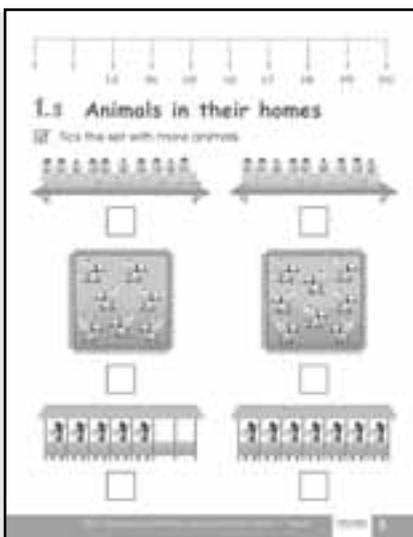
Activity 3

- Ask pupils to raise their hands if they like to travel by bus.
- Ask pupils to tell the class why they like to travel by bus.

Activity 4

- Ask pupils to play a matching game in groups of 4 to 5.
- Give each group sets of flashcards of numbers 11 to 20, and the corresponding number word cards.
- They should shuffle the cards and place them face down on the table. Pupils take turns to turn over 2 cards. If they match, the pupil keeps the cards; if they do not match they are turned back.
- The game ends when all the cards have been matched, and the pupil with the most cards wins.

1.3 Animals in their homes



Suggested duration

40 minutes

Objectives

- Compare quantities using the terms 'more' / 'fewer'.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to circle the set with more

Key terms

animal

Compare quantities using the terms 'more' / 'fewer'

Activity 1

- Show 2 flashcards, each of a different set of identical objects e.g. 8 chickens and 3 eggs, and ask pupils to identify and count the objects.
- Elicit that there are more chickens than eggs.
- Hold up the flashcard of the 8 chickens, say 'more', and ask pupils to repeat the word.
- Repeat with other pairs of cards.

Activity 2

- Ask pupils to look at Activity 1.3.
- Read the instruction, 'Tick the set with more animals.'
- Ask pupils to count with you the first set of chickens. (10)
- Repeat for the second set. (9)
- Ask pupils to point to the set with more chickens, and to tick the correct box.
- Repeat for the cows. (7, 8)
- Ask pupils to do the question on the sets of horses themselves.

Additional activities

Activity 3

- Ask pupils to talk about their favourite farm animals.
- Do pupils have any experience with their favourite farm animals? For example, riding a horse, milking a cow.

Activity 4

- Give pupils a worksheet showing sets of matching items and ask them to circle the set in each row that has more.

1.4 Ducks and ducklings



Suggested duration

40 minutes

Objectives

- Compare quantities using the terms 'more' / 'fewer'.

Required resources

- flashcards of chickens and eggs
- Additional:
drawing paper (enough for all pupils in the class)

Key terms

mother duck

duckling

Compare quantities using the terms 'more' / 'fewer'

Activity 1

- Place on a table flashcards showing chickens and eggs.
- Ask pupils to say if there are more chickens or more eggs, and guide them to match the chickens and the eggs to find out.
- Hold up the flashcard of 1 chicken and 1 egg and tell pupils that it is 1 match. Ask pupils to come and match more cards in the same way until only egg cards remain.
- Elicit that 'There are more eggs than chickens.', and ask pupils to repeat this sentence.

Activity 2

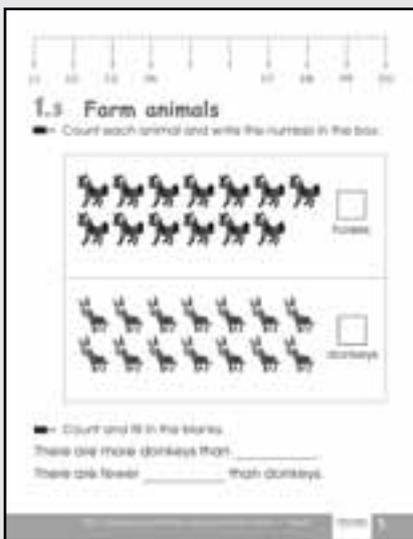
- Ask pupils to describe the picture in Activity 1.4.
- Read the sentence, 'The mother ducks are looking for their ducklings.'
- Read the instruction, 'Match each mother duck to a duckling.'
- Ask pupils to match each mother duck to a duckling by drawing lines or by circling them in pairs.
- Read the instruction, 'Fill in the blank with 'more' or 'fewer'.'
- Elicit by a show of hands that there are more mother ducks than ducklings.
- Ask pupils to write 'more' in the blank and read together 'There are more mother ducks than ducklings.'

Additional activities

Activity 3

- Give each pupil a piece of drawing paper and ask them to draw any number from 1 to 19 of their favourite farm animal.
- Then ask them to draw more young of that animal than the number of parents..
- Ask pupils to share their drawings with the class.

1.5 Farm animals



Suggested duration

40 minutes

Objectives

- Compare quantities using the terms 'more' / 'fewer'.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to draw more or fewer

Key terms

horse
donkey

Comparing quantities using the terms 'more' / 'fewer'

Activity 1

- Show pairs of flashcards of different sets of objects and ask pupils to count the objects.
- Point to one of the cards and ask pupils to say whether it shows more or fewer objects.
- Repeat the activity with different pairs of flashcards.

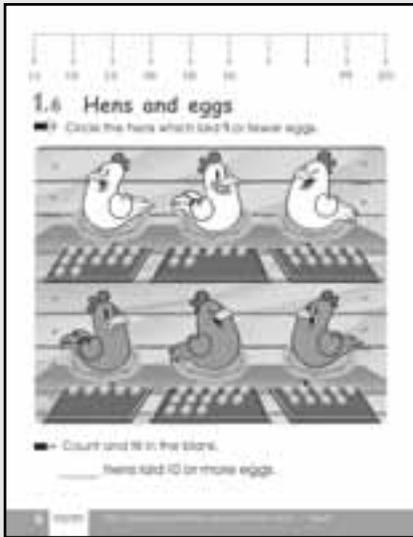
Activity 2

- Ask pupils to look at Activity 1.5.
- Read the instruction, 'Count each animal and write the number in the box.'
- Point to and count together the horses. (13) Ask pupils to write 13 in the box and say '13 horses.'
- Repeat for the donkeys. (14 donkeys)
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that there are more donkeys than horses / fewer horses than donkeys.
Guide pupils to write 'horses' in the first blank and read together, 'There are more donkeys than horses.'
- Complete the second sentence in the same way.

Additional activities

- Give pupils Worksheet 2 and ask them to count the items and draw a set that has more / fewer.
- Draw a set that has more.
- Draw a set that has fewer.

1.6 Hens and eggs



Suggested duration

40 minutes

Objectives

- Compare quantities using the terms 'more' / 'fewer'.

Required resources

- plastic eggs/table tennis balls
- 20 boxes
- 20 pieces of cloth
- flashcards of numbers 1 to 20
- Additional:
worksheet to tick the sets with 9 or fewer

Key terms

hen

egg

Compare quantities using the terms 'more' / 'fewer'

Activity 1

- Place different numbers of plastic eggs/table tennis balls in boxes and cover them with pieces of cloth.
- Ask 20 pupils to come to the front of the class and each choose a box of eggs.
- Ask pupils to pretend to be mother hens and sit on the boxes of eggs and make clucking noises.
- After some time, clap your hands and tell them they have all laid eggs. Ask them to remove the cloth and count how many eggs they have laid.
- Ask each pupil to tell you how many eggs they have 'laid' and hold up the number flashcard.
- Arrange the flashcards in order from 1 to 20 on the board.
- Point out that all the numbers on the left of 9 are fewer than 9, and the numbers on the right of 9 are more than 9.
- Ask pupils who have 'laid' 9 or fewer eggs to raise their hands, and then ask those with 10 or more eggs to raise their hands.

Activity 2

- Ask pupils to describe the picture in Activity 1.6.
- Read the instruction, 'Circle the hens which laid 9 or fewer eggs.'
- Count together the eggs that the first hen has laid. (12)
- Elicit that it is not fewer than 9 so pupils should not circle that hen.

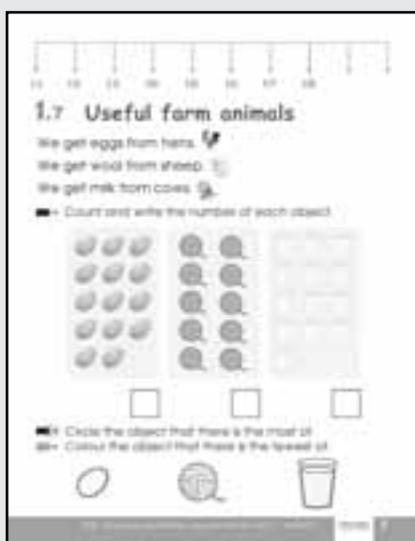
- Repeat for the second hen. (7)
- Elicit that it is fewer than 9 and ask pupils to circle that hen.
- Ask pupils to complete the exercise themselves.
- Check that 3 hens have been circled and 3 have not been circled.
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to write 3 in the blank and read together, '3 hens laid 10 or more eggs.'

Additional activities

Activity 3

- Give pupils Worksheet 3 and ask pupils to tick the sets of 9 or fewer.

1.7 Useful farm animals



Suggested duration

40 minutes

Objectives

- Compare quantities using the terms 'most' / 'fewest'.

Required resources

- counters
- Additional:
worksheets to classify most and fewest

Key terms

wool
sheep
milk
cow

Comparing quantities using the terms 'most' / 'fewest'

Activity 1

- Ask 3 pupils to come to the front of the class and give each a different number of counters e.g. 10; 15; 20.
- Ask the pupils to count their counters and say how many they each have.
- Elicit that the pupil with 10 has the fewest counters and ask pupils to repeat the phrase 3 times.
- Elicit that the pupil with 20 has the most counters and ask pupils to repeat the phrase 3 times.

Activity 2

- Ask pupils to look at Activity 1.7.
- Read and discuss the statements 'We get eggs from hens.' 'We get wool from sheep.' and 'We get milk from cows.'
- Read the instruction, 'Count and write the number of each object.'
- Ask pupils to count the eggs. (14) Ask pupils to write 14 in the box below the eggs.
- Ask pupils to count the balls of wool. (10) Ask pupils to write 10 in the box below the wool.
- Ask pupils to count the glasses of milk. (13) Ask pupils to write 13 in the box below the milk.
- Read the instruction, 'Circle the object that there is the most of.'
- Elicit that they should circle the eggs and ask them to do this.
- Elicit that they should colour the balls of wool and ask them to do this.

Additional activities

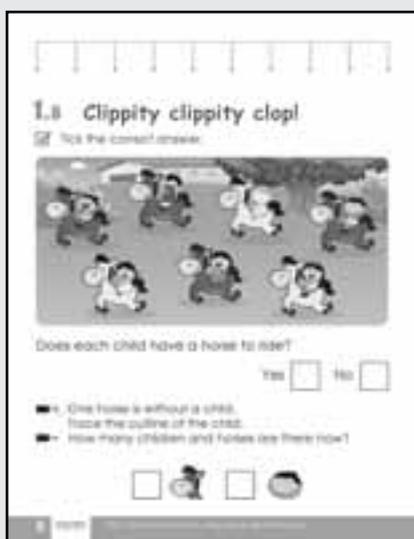
Activity 3

- Discuss the usefulness of farm animals.
- If necessary, explain that cows give us milk, sheep give us wool to keep us warm, and hens give us eggs, etc.

Activity 4

- Give pupils a worksheet showing sets of objects and ask them to classify them into most and fewest.

1.8 Clippity clippity clop!



Suggested duration

40 minutes

Objectives

- Count and match using visual discrimination.

Required resources

- apples
- Additional:
worksheet to match horses to stables

Key terms

horse

Counting and matching using visual discrimination

Activity 1

- Place e.g. 10 apples at the front of the classroom, and ask 11 pupils to form a line.
- Elicit that there are not enough apples for each pupil to have one.
- Add two apples and elicit that there are now enough for each pupil to have one.
- Repeat the activity with different numbers of pupils and apples so that pupils can visualize if there is an apple for each pupil.

Activity 2

- Ask pupils to describe the picture in Activity 1.8.
- Read the instruction, 'Tick the correct answer', and the question, 'Does each child have a horse to ride?'
- Ask the pupils to see if they can match each child to a horse, and then to tick the 'yes' box.
- Read the statement, 'One horse is without a child.' Ask pupils to point to the horse without a child.
- Read the instruction, 'Trace the outline of the child.' Ask pupils to trace the outline in pencil.
- Read the question, 'How many children and horses are there now?'
- Ask pupils to count the horses, (7) and write 7 in the box beside the horse.
- Ask 'How many children are there?' Pupils should see that one child is matched to each horse, so there should be the same number of children as horses.
- Guide pupils to write 7 in the box beside the child.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have ridden a horse.
- Ask pupils to raise their hands if they would like to ride a horse.

Activity 4

- Give pupils a worksheet that shows fewer horses than stables.
- Ask pupils if every horse has a stable, and if every stable has a horse.
- Ask pupils to draw more horses so that there is a horse for every stable.
- Ask pupils to count the stables and the horses.

Introduction

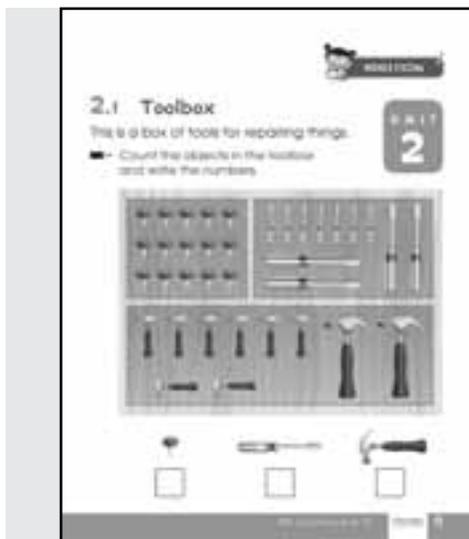
In this unit, pupils are introduced to the concept of addition. By the end of the unit, pupils should be able to associate the words 'and' and 'altogether' with addition, and use the '+' sign to write simple addition sentences.



Pre-assessment activity

- Use flashcards to revise the numbers 0 to 20 or ask pupils to show these numbers using their fingers.
- Use flashcards to introduce number bonds. For example, show flashcards of 5 roses and 9 hibiscuses. Ask pupils to identify and count the sets and say how many items there are altogether.
- Write the following number bond on the board and relate it to the example:
- Repeat with other flashcards or sets of real items.

2.1 Toolbox



Suggested duration

40 minutes

Objectives

- Count up to 15.

Required resources

- stack of books
- Additional:
worksheet to count and write the numbers

Key terms

toolbox

Counting up to 15

Activity 1

- Show pupils a stack of 3 different kinds of books, for example some English, some science and some mathematics books. There should be no more than 15 of each type of book.
- Ask a pupil to select and count the English books. Ask other pupils to do the same for the science and maths books. (e.g. 15;12;10)
- Point to each stack in turn and ask the pupils to repeat after you, e.g., 'There are 15 English books, 12 science books, and 10 mathematics books.'

Activity 2

- Ask pupils to describe the picture in Activity 2.1. You could also show the students a toolbox and explain briefly what each tool is used for.
- Read the statement, 'This is a box of tools for repairing things.'
- Read the instruction, 'Count the objects in the toolbox and write the numbers.'
- Point to and count together the nails. (15) Ask pupils to write 15 in the box next to the nail.
- Repeat for the screwdrivers (11) and hammers. (10)

Additional activities

Activity 3

- Ask pupils to raise their hands if they have a toolbox at home.
- Talk about different tools and their uses.

Activity 4

- Give pupils a worksheet showing, e.g. a toy box with different compartments and different numbers of toys in each compartment.
- Ask pupils to count each of the different toys.

2.2 Shayaan's toys



Suggested duration

40 minutes

Objectives

- Count large sets and use 'more' / 'fewer' correctly.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to circle the sets with more or fewer

Key terms

toy soldiers

Count large sets and use 'more' / 'fewer' correctly

Activity 1

- Show flashcards of sets of up to 20 objects and ask pupils to identify and count the objects, e.g. 18 dolls.
- Repeat with a flashcard of e.g. 20 robots.
- Elicit that there are more robots than dolls, and fewer dolls than robots.
- Repeat the activity with flashcards showing different sets of objects.

Activity 2

- Ask pupils to describe the picture in Activity 2.2.
- Read the instruction, 'Count and write the numbers.'
- Ask pupils to count the toy cars, (12) and write 12 in the box beside the toy car.
- Repeat for the toy planes. (18)
- Read the instruction, 'Colour 20 toy soldiers.' Ask pupils to count the toy soldiers as they colour 20 of them.
- Read the instruction, 'Fill in the blank with 'more' or 'fewer'.'
- Ask pupils to compare the numbers of toy soldiers and toy planes. Elicit by a show of hands that there are more soldiers than planes, and guide pupils to write 'more' in the blank.
- Ask pupils to repeat after you, 'There are more toy soldiers than planes.'

Additional activities

Activity 3

- Ask pupils to raise their hands if they have a toy box.
- Ask them to tell the class what toys they have in their toy box.

Activity 4

- Give pupils Worksheet 4 and ask them to circle the sets with more or fewer.

2.3 Hide and seek



Suggested duration

40 minutes

Objectives

- Count in sequence from 11 to 20.

Required resources

- flashcards showing 11 to 20 objects
- flashcards of numbers 11 to 20
- Additional:
join the dots worksheet

Key terms

hide and seek

Counting in sequence from 11 to 20

Activity 1

- Show flashcards of sets of 11 to 20 objects and ask pupils to identify the objects.
- Show each card in turn and ask pupils to count the items in each set, e.g. 11.
- Hold up the flashcard of number 11, and ask pupils to say the number.
- Repeat with flashcards of other sets of from 11 to 20 objects in sequence.
- Show the number flashcards in sequence and ask pupils to recite the sequence from 11 to 20.

Activity 2

- Ask pupils to look at Activity 2.3.
- Read the sentence, 'Maria and her cousins are playing hide and seek.' If necessary, explain the game hide and seek.
- Read the instruction, 'Help Maria find Nadir by joining the dots in order.'
- Ask pupils to count and trace the sequence of numbers from 11 to 20 with a finger before joining the dots with pencil.
- Elicit that they have helped Maria to find Nadir.

Additional activities

Activity 3

- Play a game of hide and seek.
- Ask pupils what they like/dislike about the game.

Activity 4

- Give pupils a join-the-dots worksheet with dots numbered from 1 – 20 and ask them to join the dots in order.

2.4 Maria's garden



Suggested duration

40 minutes

Objectives

- Associate the word 'and' with addition.

Required resources

- red and blue marbles
- Additional:
drawing paper (enough for all pupils in the class)
sets of stickers – 5 carnations, 9 hibiscuses

Key terms

sunflower

orchid

rose

Associate the word 'and' with addition

Activity 1

- Ask 3 girls and 4 boys to come to the front of the class.
- Ask the pupils to count the boys and the girls separately.
- Guide the pupils to find the total number of children by counting on from 4 to 7.
- Ask pupils to repeat after you, 'There are 7 boys and girls.'
- Place 5 red marbles and 8 blue marbles on the table. Ask pupils to count on from 8 to 13 to find the total number of marbles. Ask them to repeat, 'There are 13 marbles.'

Activity 2

- Ask pupils to describe the picture in Activity 2.4.
- Read the instruction, 'Colour the sunflowers yellow.' Ask pupils to point to the sunflowers and colour them yellow.
- Repeat for the orchids (purple) and the roses (red).
- Read the instruction, 'Count and fill in the blanks.' Ask pupils to count the total number of orchids and sunflowers.
- Ask them to point to and count the orchids, (3) and count on, pointing to the sunflowers.
- Ask them to write 6 in the first blank and read together, 'There are 6 orchids and sunflowers.'
- Help pupils to count the total number of roses and orchids in the same way, and write 6 in the second blank.
- Read together, 'There are 6 roses and orchids.'

Additional activities

Activity 3

- Give each pupil a piece of drawing paper and a set of 5 carnation and 9 hibiscus stickers, or provide cut-out flowers and glue.
- Ask pupils to stick the flowers onto the paper and decorate their pictures by drawing the flowers in pots, in a park, by a garden path, etc.
- Ask them to find the total number of carnations and hibiscuses.
- Ask pupils to share their drawings with the class.

2.5 Grandpa's stamps



Suggested duration

40 minutes

Objectives

- Associate the words 'and' and 'altogether' with addition.

Required Resources

- red and blue marbles
- Additional:
worksheet to count the number altogether

Key terms

grandpa
stamp

Associate the words 'and' and 'altogether' with addition

Activity 1

- Place 7 red and 10 blue marbles on the table.
- Ask, 'How many marbles are there?' Lead pupils to count on from 10 to 17.
- Ask pupils to repeat after you, 'There are 17 marbles.'
- Repeat the activity with different numbers of marbles, emphasizing 'and' and 'altogether' in connection with addition.

Activity 2

- Ask pupils to look at Activity 2.5.
- Read the statement, 'Grandpa has square, triangle and round-shaped stamps.'
- Ask pupils to point to the different stamps.

- Read the instruction, 'Help Grandpa count his stamps and fill in the blanks.'
- Point to and count together the square stamps, (4) and count on the triangular stamps to find the total number. (7)
- Ask pupils to write 7 in the first blank. Read together, 'Grandpa has 7 square and triangle-shaped stamps altogether.'
- Ask pupils to count the other 2 sets of stamps themselves.
- Emphasize the use of 'and' and 'altogether' in addition questions.

Additional activities

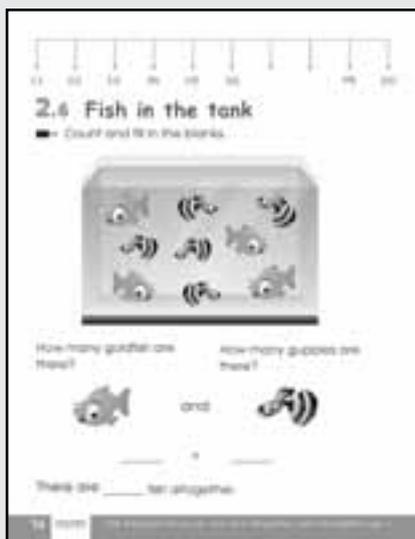
Activity 3

- Ask pupils to raise their hands if they collect stamps.
- Ask them to talk about their stamp collections. What shapes and sizes are the stamps? How many stamps do they have altogether?

Activity 4

- Give pupils Worksheet 5 and ask them to count and write the totals.

2.6 Fish in the tank



Suggested duration

40 minutes

Objectives

- Associate the words 'and' and 'altogether' with the addition sign '+'.

Required resources

- flashcards of different sets of animals
- Additional: worksheet to write the addition sentence and count the number altogether

Key terms

goldfish

guppy

Associate the words 'and' and 'altogether' with the addition sign '+'

Activity 1

- Show flashcards of different sets of animals, e.g. 3 yellow birds and 5 red birds.
- Ask pupils to count the birds in each set, and repeat, e.g., 'There are 3 yellow birds. There are 5 red birds.'

- Write on the board '3 and 5', placing the corresponding flashcards below the sentence.
- Ask how many birds there are altogether and count on together from 3 to 8.
- Write the addition sentence as you point to the pictorial representation. Say, 'There are 3 yellow birds,' and write 3 on the board.
- Say, 'and 5 red birds.' and write + 5 on the board.
- Say, 'There are 8 birds altogether.' and write = 8 on the board.
- Ask pupils to read with you the addition sentence '3 + 5 = 8'.

Activity 2

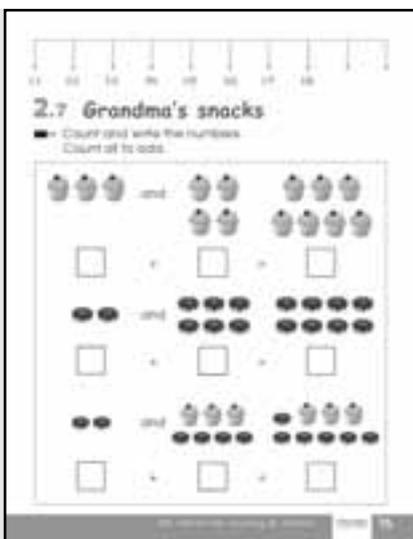
- Ask pupils to describe the picture in Activity 2.6.
- Read the instruction, 'Count and fill in the blanks.'
- Read the question, 'How many goldfish are there?' Ask pupils to count the goldfish. (4)
- Read the question, 'How many guppies are there?' Ask pupils to count the guppies. (5)
- Guide pupils to write '4 + 5'.
- Ask pupils to count how many fish there are altogether. (9)
- Ask pupils to write 9 in the blank. Read together, 'There are 9 fish altogether.'

Additional activities

Activity 3

- Give pupils Worksheet 6 and ask them to write the addition sentence and count how many altogether.

2.7 Grandma's snacks



Suggested duration

40 minutes

Objectives

- Add by the 'counting all' method.

Required resources

- 3 boxes
- red and blue marbles
- Additional:
worksheets to write the addition sentence and count all to add

Adding by the 'counting all' method

Activity 1

- Place 3 boxes in front of class. Put 5 red marbles in the first box and 3 blue marbles in the second.
- Ask, 'How many marbles are there altogether?' Count the 5 red marbles into the third box and then count on to 8 as the marbles from the second box are added to them.
- Elicit that 'There are 8 marbles altogether.' Write on the board the addition sentence ' $5 + 3 = 8$ '.
- Repeat with 8 red marbles in the first box and 4 blue marbles in the second box.
- Write on the board the addition sentence ' $8 + 4 = 12$ '.

Activity 2

- Ask pupils to look at Activity 2.7.
- Read the instruction, 'Count and write the numbers.'
- Ask pupils to count the first set of cupcakes. (3) Ask them to write 3 in the box below them.
- Repeat for the second set of cup cakes. (4)
- Ask pupils to count the doughnuts and cupcakes in the second and third questions and fill in the boxes themselves.
- Read the instruction, 'Count all to add.'
- Pointing to the third set of cupcakes in the first question, count together from 1 to 7.
- Ask pupils to write 7 in the box so that the addition sentence becomes ' $3 + 4 = 7$ '.
- Ask pupils to complete the addition sentences for the second and third questions themselves.

Additional activities

Activity 3

- Give pupils Worksheet 7 and ask them to write the addition sentences and count all to add.

2.8 Fun with kites



Suggested duration

40 minutes

Objectives

- Add using a number line.

Required resources

- worksheet to count on using a number line

Key terms

number line

kite

Adding using a number line

Activity 1

- Demonstrate how to draw a number line. Draw a line on the board with 21 regular markings along it. Write '0' under the first marking.
- Ask what number comes next and write 1 under the next mark.
- Continue asking for the next numbers to complete the number line from 0 to 20.

Activity 2

- Ask pupils to look at Activity 2.8.
- Read the instruction, 'Use the number line to count on.'
- Ask pupils to look at the blue kite and read aloud, $12 + 5$.
- Show the pupils how to use the number line to do addition. Ask them to place their index finger on the number 12 on the number line. Count 1, and show them how to move their finger to the next marking, 13. Continue counting 2, 3, 4, 5, asking pupils to move their finger one place each time.
- Elicit that they have ended on 17 and write on the board ' $12 + 5 = 17$ '.
- Read the instruction, 'Add and match each child to the correct kite.'
- Guide pupils to match $12 + 5$ to the child with 17 on his shirt, using a pencil and a ruler.
- Ask pupils to do the other 2 addition questions themselves.

Additional activities

Activity 3

- Give pupils a worksheet showing a number line at the top which can be used for reference, and some addition to 20 questions.
- Ask pupils to use the number line to solve the addition questions.

Introduction

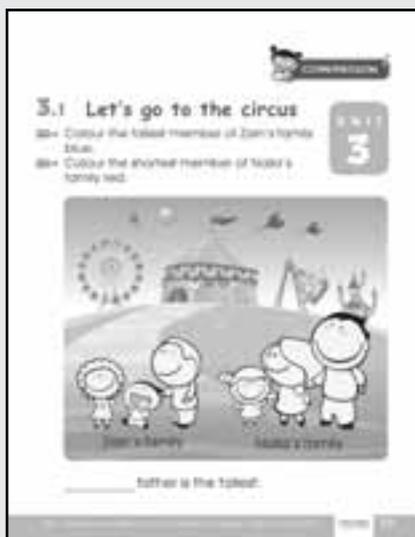
In this unit, pupils learn to compare objects by height, length, size, and weight. By the end of this unit, pupils should be able to use correctly the terms tallest, shortest, longest, bigger, smaller, heavier and lighter.



Pre-assessment activity

- Ask 2 pupils of different heights to stand at the front of the classroom. Elicit that the pupils are not 'the same' and introduce the term 'taller' by pointing to the taller pupil. Write 'taller' on the board and ask pupils to repeat the word 3 times.
- Introduce the term 'shorter' in the same way.
- Stand next to the 2 pupils and point to yourself to introduce the term 'tallest'. Write the term on the board and ask pupils to repeat as above.
- Point to the shorter pupil and introduce the term 'shortest'.
- Practise the words with different sets of 2 and 3 pupils.

3.1 Let's go to the circus



Suggested duration

40 minutes

Objectives

- Use the terms tallest and shortest to compare objects by height.

Required resources

- Additional:
drawing paper (enough for all pupils in the class)

Key terms

tallest

shortest

family

Using the term tallest and shortest to compare objects by height

Activity 1

- Help pupils to compare heights with a partner.
- Ask the taller of each pair to raise a hand when you say 'taller', and the shorter to raise a hand when you say 'shorter'.

- Ask pupils to form groups of 3 and indicate in the same way who is the tallest/shortest.

Activity 2

- Ask pupils to describe the picture in Activity 3.1.
- Read the instruction, 'Colour the tallest member of Zain's family blue.'
- Ask pupils to point to the tallest member of Zain's family, (Zain's father) and colour him blue.
- Read the instruction, 'Colour the shortest member of Naila's family red.'
- Ask pupils to point to the shortest member of Naila's family, (Naila) and colour her red.
- Ask pupils to look at Zain's father and Naila's father and decide who is taller.
- Guide pupils to write 'Naila's' in the blank. Read together, 'Naila's father is the tallest.'

Additional activities

Activity 3

- Ask pupils to bring a family photo to class and talk about their families.
- Ask pupils to say who the tallest/shortest member of the family is.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw a picture of their family.
- Pupils should write 'tallest' and 'shortest' below the respective members of the family.
- Ask pupils to share their drawings with the class.

3.2 Performing dogs



Suggested duration

40 minutes

Objectives

- Use the terms longer and shorter to compare the lengths of objects.

Required resources

- objects of different lengths
- Additional:
worksheet to identify the longer or shorter object

Key terms

dog
leap
hoop
longer
shorter

Using the terms longer and shorter to compare the length of objects

Activity 1

- Show pupils objects of different lengths, e.g. a long and a short ruler. Ask them to say which is longer/shorter.
- Hold up the long ruler and say 'longer'. Write the word on the board and ask pupils to repeat it.
- Repeat for the shorter ruler.
- Repeat with other pairs of objects, e.g. pencils, scarves, etc.
- Ask pupils to identify pairs of classroom objects that are longer or shorter.

Activity 2

- Ask pupils to describe the picture in Activity 3.2.
- Read the statement, 'The dogs are leaping through hoops.'
- Read the instruction, 'Colour the dog with shorter ears.'
- Ask pupils to point to the dog with the shorter ears and to colour it.
- Read the instruction, 'Circle the dog with longer ears.'
- Ask pupils to point to the dog with the longer ears and circle it with pencil.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen dogs perform in a circus. Did they notice if the dogs' ears were different?
- Encourage pupils to look at the ears of dogs and cats as they walk along the streets to see which are longer / shorter.

Activity 4

- Give pupils Worksheet 8 and ask them to cross out the longer object and circle the shorter object in each set.

3.3 Seals



Suggested duration

40 minutes

Objectives

- Use the terms bigger and smaller to compare objects by size.

Required resources

- objects of different sizes
- Additional:
worksheet to match the bigger to the smaller animal

Key terms

ball

seal

Using the terms bigger and smaller to compare objects by size

Activity 1

- Show pupils objects of different sizes, e.g. a large and a small teddy bear.
- Hold up the larger bear and say 'bigger'. Write the word on the board and ask pupils to repeat it.
- Introduce the term 'smaller' in the same way.
- Repeat with another pair of objects, e.g. a large and a small ball.
- Ask pupils to identify pairs of classroom objects that are bigger or smaller.

Activity 2

- Ask pupils to describe the picture in Activity 3.3.
- Read the instruction, 'Colour each ball with a different colour.'
- Ask pupils to colour the 2 balls in 2 given colours, e.g. the bigger ball in red and the smaller in blue.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to compare the sizes of the balls and point to the bigger one. Ask them to fill in the blanks correctly, e.g. 'The red ball is bigger than the blue ball.'
- Ask pupils to compare the seals and elicit that the grey seal is smaller.
- Ask them to fill in the blanks correctly and read the statement together.

Additional activities

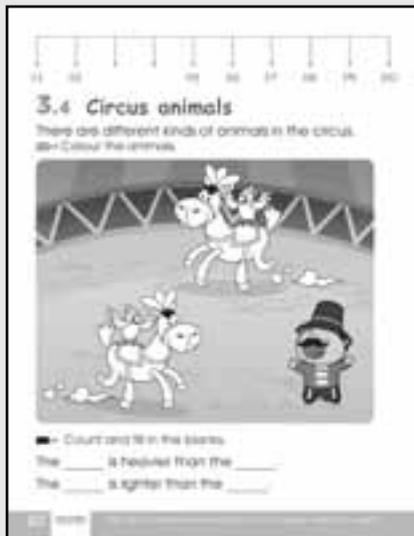
Activity 3

- Ask pupils to raise their hands if they have seen seals perform in a circus.
- Ask pupils to relate their experiences to the class.

Activity 4

- Give pupils Worksheet 9. Ask them to draw lines to match the smaller and larger animals.

3.4 Circus animals



Suggested duration

40 minutes

Objectives

- Use the terms heavier and lighter to compare objects by weight.

Required resources

- objects of different weights
- Additional:
worksheet to identify the heavier and lighter animal

Key terms

animal

circus

heavier

lighter

Using the terms heavier and lighter to compare objects by weight

Activity 1

- Show students pairs of objects of different weights e.g. a feather and a rock. Use these items to introduce the terms 'heavier' and 'lighter' as in previous units. It would be useful to pass the items round the class so pupils can compare their weights.
- Ask pupils to compare pairs of classroom objects by weight.

Activity 2

- Ask pupils to describe the picture in Activity 3.4.
- Read the statement, 'There are different kinds of animals in the circus.'
- Read the instruction, 'Colour the animals.'
- Ask pupils to point to and colour the birds, and then the horses.
- Elicit that the horse is heavier than the bird.
- Guide pupils to fill in the blanks and read together, 'The horse is heavier than the bird.' and 'The bird is lighter than the horse.' Ask pupils to repeat the sentences.

Additional activities

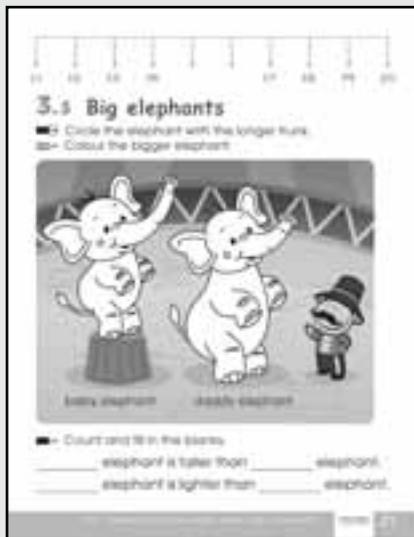
Activity 3

- Ask pupils to raise their hands if they have seen horses and birds at a circus.
- Ask pupils to relate their experiences.

Activity 4

- Give pupils Worksheet 10. Ask them to name the animals and fill in the blanks.

3.5 Big elephants



Suggested duration

40 minutes

Objectives

- Compare objects by height, length, size and weight.

Required resources

- flashcards of different objects or animals
- Additional:
comparison worksheet

Key terms

elephant

trunk

Compare objects by height, length, size and weight

Activity 1

- Show flashcards of different objects or animals, e.g. a duck and a duckling, and ask pupils to compare them. For example, ask 'Which is bigger?' 'Which is lighter?' and hold up the relevant picture when they answer..
- Repeat with other pairs of flashcards and different questions.

Activity 2

- Ask pupils to describe the picture in Activity 3.5.
- Read the instruction, 'Circle the elephant with the longer trunk.'
- Elicit that this is the baby elephant and ask pupils to circle it in pencil.
- Read the instruction, 'Colour the bigger elephant.'
- Elicit that this is the daddy elephant and ask pupils to colour it.
- Ask , 'Which is taller? Baby or daddy elephant?'
Guide pupils to complete the sentence 'Daddy elephant is taller than baby elephant.'
- Read the sentence together.
- Ask "Which is lighter? Baby or daddy elephant?"

- Guide pupils to complete the sentence, 'Baby elephant is lighter than daddy elephant' and read it together.

Additional activities

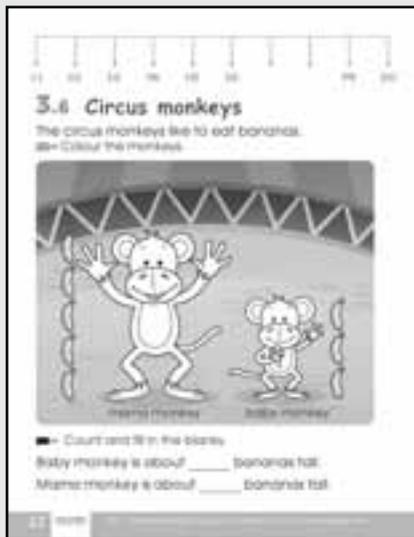
Activity 3

- Ask pupils to raise their hands if they have seen elephants perform at a circus.
- Ask pupils to relate their experiences.

Activity 4

- Give pupils Worksheet 11 and ask them to instruct the pupils to:
 - 1) Circle the bigger duck. 2) Cross out the duck with the shorter beak.
 - 3) Fill in the blanks.

3.6 Circus monkeys



Suggested duration

40 minutes

Objectives

- Compare heights using non-standard units of measurement.

Required resources

- boxes or building blocks
- Additional: worksheets to compare heights using non-standard units

Key terms

monkey
banana

Comparing heights using non-standard units of measurement

Activity 1

- Prepare boxes or building blocks that can be stacked to measure pupils' heights.
- Ask for a pupil volunteer and stack the boxes / building blocks to measure his/her height.
- Tell that pupil, e.g. 'You are 5 boxes tall.' Ask pupils to repeat, '(Name of pupil) is 5 boxes tall.'
- Ask a pupil to measure your height in the same way.
- Ask pupils to repeat after you, 'The teacher is (e.g.) 8 boxes tall.'

Activity 2

- Ask pupils to describe the picture in Activity 3.6.
- Read the statement, 'The circus monkeys like to eat bananas.'
- Read the instruction, 'Colour the monkeys.' Ask pupils to colour the monkeys.

- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to count the bananas beside baby monkey. (3)
- Ask them to write 3 in the blank and read together, 'Baby monkey is about 3 bananas tall.'
- Repeat for the height of mama monkey. (5)

Additional activities

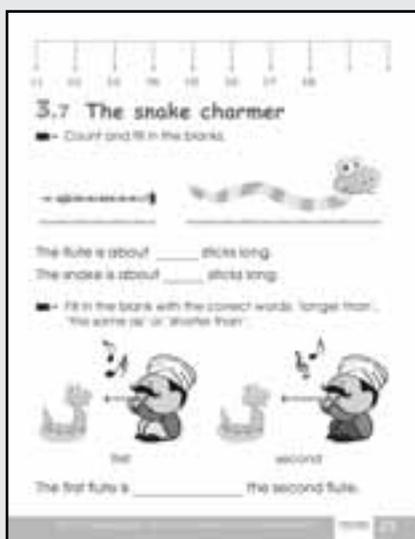
Activity 3

- Ask pupils to raise their hands if they have seen monkeys perform at a circus.
- Ask pupils to relate their experiences.

Activity 4

- Give pupils Worksheet 12. Elicit that the height of the lion is 3 flowers and tell them that the height of a giraffe is 5 flowers.
- Ask them to draw the correct number of flowers beside the giraffe.

3.7 The snake charmer



Suggested duration

40 minutes

Objectives

- Compare lengths using non-standard units of measurement.

Required resources

- objects of different lengths
- paper clips
- Additional:
drawing paper (enough for all pupils in the class),
water colours
paper clips

Key terms

flute
stick
snake

Comparing lengths using non-standard units of measurement

Activity 1

- Show the pupils objects of different lengths, e.g. 2 rulers, and explain that you want to use paper clips to measure their lengths.
- Place the short ruler on the table and place paper clips along the entire length of the ruler. (e.g. 10 paper clips)

- Repeat with the second ruler. (e.g. 20 paper clips)
- Repeat the activity using different pairs of objects and different non-standard units of measurement.

Activity 2

- Ask pupils to describe the picture in Activity 3.7.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to count the sticks beside the flute. (6)
- Ask pupils to write 6 in the first blank and read together, 'The flute is about 6 sticks long.'
- Repeat for the sticks beside the snake. (10).
- Read the instruction, 'Fill in the blank with the correct words: 'longer than', 'the same as' or 'shorter than'.'
- Guide pupils to fill in the blank with 'shorter than' and read together, 'The first flute is shorter than the second flute.'

Additional activities

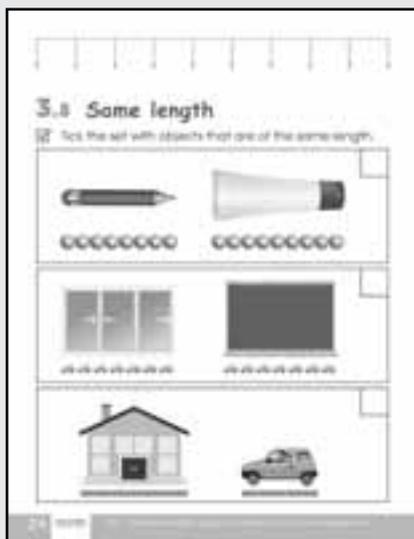
Activity 3

- Ask pupils to raise their hands if they have seen snake charmers.
- Ask pupils to share their impressions of snake charmers.

Activity 4

- Give each pupil a sheet of drawing paper.
- Ask pupils to use water colour to make hand prints on the paper.
- Ask them to use paper clips to measure the length of their hand.
- Ask pupils to tell the class, 'My hand is ___ paper clips long.'

3.8 Same length



Suggested duration

40 minutes

Objectives

- Compare lengths using non-standard units of measurement.

Required resources

- pencils of same and different lengths
- paper clips
- marbles
- Additional: worksheets to compare lengths using non-standard units.

Comparing lengths using non-standard units of measurement

Activity 1

- Use paper clips as in Activity 1 of Unit 3.7 to measure the lengths of 2 pencils of the same length, e.g. 10 paper clips.
- Ask pupils to repeat after you, 'The pencils are the same length.'
- Measure a longer pencil, e.g. 15 paper clips and elicit, 'The pencil is 15 paper clips long.'
- Measure one of the shorter pencils, using a smaller unit, e.g. marbles, so that the length is 15 marbles long.
- Pupils should compare the lengths of 15 paper clips and 15 marbles. Are they the same?

Activity 2

- Ask pupils to look at Activity 3.8.
- Read the instruction, 'Tick the set with objects that are of the same length.'
- Ask pupils to count the marbles beside the first pencil. (8) Elicit that 'The pencil is 8 marbles long.'
- Repeat for the tube of cream. (9) Elicit that 'The tube of cream is 9 marbles long.'
- Elicit by a show of hands that the objects are not the same length and the box should not be ticked.
- Ask pupils to count the toy cars beside the window and blackboard in question 2. (7) Elicit that they are the same length, and ask pupils to tick the box.
- Ask pupils to do the third question by themselves.

Additional activities

Activity 3

- Give pupils a worksheet showing pairs of objects with non-standard units of measurement below to measure their lengths. For one of the questions, draw the same number of 2 different non-standard units to measure the lengths of the objects.
- Ask pupils to count and tick the pair that are the same length.

Introduction

In this unit, pupils learn to count backwards. By the end of the unit pupils should be able to count backwards from 20 and relate it to subtraction.

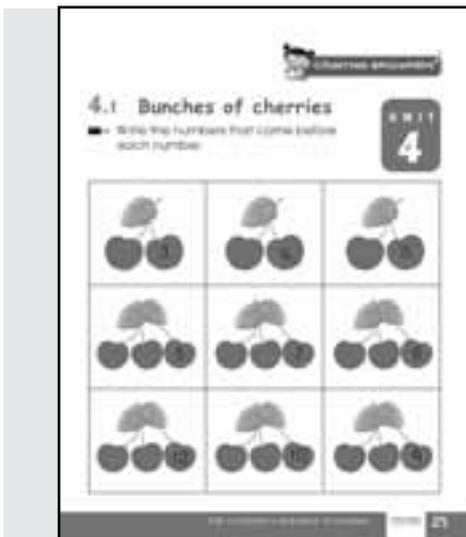


Pre-assessment activity

- Revise numbers 0 to 20 as in previous units.
- Use flashcards or sets of objects to revise counting on to find the total number.
- Revise counting forwards and backwards. Explain that counting forwards is related to addition, and counting backwards is related to subtraction.



4.1 Bunches of cherries



Suggested duration

1 hour

Objectives

- Complete a sequence of numbers.

Required resources

- flashcards of numbers 1 to 20
- Additional:
paper strips
glue

Completing a sequence of numbers

Activity 1

- Place flashcards on the board showing a sequence of 3 numbers, e.g. 11, 12, 13, and ask pupils to recite the numbers backwards 13, 12, 11.
- Repeat with different sequences until pupils are familiar with sequences of three numbers.
- Test by saying the first number, e.g. 15, and ask pupils to complete the sequence. (14,13)

Activity 2

- Ask pupils to look at Activity 4.1.
- Read the instruction 'Write the numbers that come before each number.'
- Point to the first two cherries and elicit that 2 comes before 3. Guide pupils to write 2 in the first blank cherry.
- Repeat for the second pair of cherries and ask pupils to complete the third pair themselves.

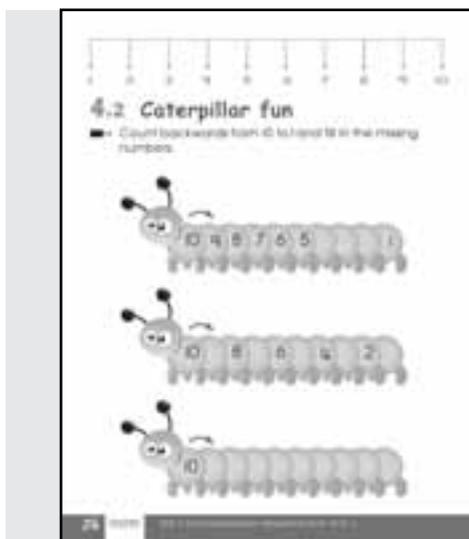
- Look at the first set of 3 cherries. Elicit that 4 and 3 come before 5 and guide pupils to write 4 before 5 and 3 before 4.
- Ask pupils to write the rest of the numbers themselves.

Additional activities

Activity 3

- Give each pupil 20 coloured paper strips and ask them to number each strip by writing the numbers in backwards sequence from 20 to 1.
- Ask pupils to take the paper strip with the number 20 and glue both ends together so that it forms a loop.
- Next ask them to take the paper strip numbered 19 and put it through the loop of the first paper strip. Glue both ends of the paper strip numbered 19 together so that the loops are linked.
- Continue joining the paper strips in sequence to make a chain of 20 links. As pupils link each loop on the chain, encourage them to recite the backwards sequence of numbers.

4.2 Caterpillar fun



Suggested duration

40 minutes

Objectives

- Count backwards in sequence from 10 to 1.

Required resources

- flashcards of numbers 1 to 10
- Additional:
drawing paper (enough for all pupils in the class)
water colour

Counting backwards in sequence from 10 to 1

Activity 1

- Scatter flashcards of numbers 1 to 10 on the table.
- Ask pupils to arrange the cards in order backwards and place them in sequence on the board.
- The rest of the class checks that the order is correct.
- Ask pupils to recite the sequence from 10 to 1.

Activity 2

- Ask pupils to look at Activity 4.2.
- Read the instruction, 'Count backwards from 10 to 1 and fill in the missing numbers.'

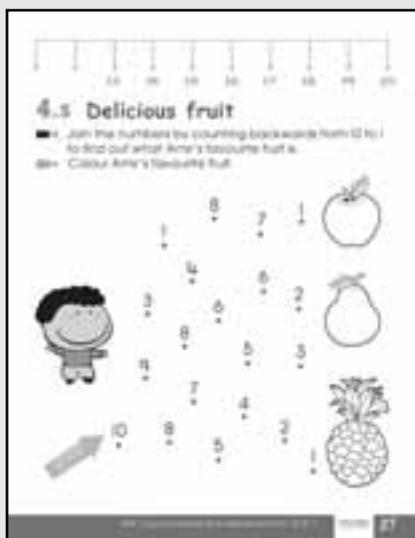
- Look at the first caterpillar and read together '10, 9, 8, 7, 6, 5.'
- Ask 'What comes before 5?' Guide pupils to write 4 before 5 on the caterpillar.
- Repeat for the other missing numbers in the sequence.
- Point to the completed sequence of numbers and recite with the pupils – 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.
- Ask pupils to complete the sequences on the other 2 caterpillars themselves.

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and ask them to make handprints on it using water colour.
- Ask them to number each of the finger prints starting with 10 on the little finger of the right hand.

4.3 Delicious fruit



Suggested duration

40 minutes

Objectives

- Count backwards in sequence from 10 to 1.

Required resources

- magnetic numbers from 1 to 10
- magnetic board
- Additional:
join the dots worksheet

Key terms

fruit

Counting backwards in sequence from 10 to 1

Activity 1

- Place some magnetic numbers in backwards sequence on the magnetic board, e.g. 10, , 8, 7, , 5, 4, , 2, .
- Ask pupils to place the correct magnetic numbers in the spaces.
- Repeat the activity with different pupils and different numbers missing in the sequence.

Activity 2

- Ask pupils to describe the picture in Activity 4.3.
- Read the instruction, 'Join the numbers by counting backwards 10 to 1 to find out what Amir's favourite fruit is.'

- Pupils should place their pencils on 10 at the start arrow. Elicit that 9 comes before 10 and ask them to draw a line to join the dot from 10 to 9. Then ask, 'What comes before 9?'
- When pupils say 8, ask them to use their pencils to join the dot from 9 to 8.
- Continue to count with the pupils from 8 backwards to 1 and ask them to join the dots until they reach Amir's favourite fruit.
- When all the dots have been joined, elicit that the pineapple is Amir's favourite fruit. Read the instruction, 'Colour Amir's favourite fruit.' Ask pupils to colour the pineapple.

Additional activities

Activity 3

- Ask pupils to share with the class their favourite fruit and explain why it is their favourite.

Activity 4

- Give pupils more join the dots worksheets to practise counting backwards in sequence from 10 to 1.

4.4 Mr Rabbit and the carrot



Suggested duration

40 minutes

Objectives

- Count a given number of steps backwards.

Required resources

- magnetic animals
- Additional:
large game board
dice

Key terms

rabbit

carrot

Counting a given number of steps backwards

Activity 1

- Use the board and magnetic animals to tell a story. Draw a scenario on the board, for example, animals on a racing track like the one shown below, and ask 3 pupils to each take one of the animals.



10	9	8	7	6	5	4	3	2	1
10	9	8	7	6	5	4	3	2	1
10	9	8	7	6	5	4	3	2	1

- Explain that the animals compete to see who runs backwards the fastest.
- Tell pupils that the tortoise takes one step backwards, the snake slithers/moves 3 steps backwards and the cat moves 8 steps backwards.
- The 3 pupils should move the animals as directed and the class should say which the numbered box the animal lands on.
- Repeat with other instructions.

Activity 2

- Ask pupils to describe the picture in Activity 4.4.
- Read the statement, 'Mr Rabbit hops back 3 steps to get the carrot.'
- Ask pupils to place a finger on stone number 8 beside the rabbit and count backwards 3 steps together. Elicit that the carrot is on stone 5.
- Read the instruction 'Colour the carrot.' Ask pupils to colour the carrot.
- Read the instruction, 'Tick the correct answer.'
- Read the question, 'Does Mr Rabbit get the carrot?'
- Elicit that Mr Rabbit gets the carrot because he lands on stone 5 where the carrot is.
- Ask pupils to tick the 'yes' box.

Additional activities

Activity 3

- Place a large game board in the middle of the classroom.
- The game board can be drawn on a large sheet of paper and should look like this:

10	9	8	7	6	5	4	3	2	1
10	9	8	7	6	5	4	3	2	1
10	9	8	7	6	5	4	3	2	1

- Make a dice that has 3 faces numbered 1, 2, and 3 and 3 faces with '1 step backwards', '2 step backwards' and '3 step backwards'.
- Pupils start on number 10 and take turns to throw the dice and move either backwards or forwards according to what is shown on the dice (1, 2, 3 means move that number of places forward).
- The first pupil to move from 10 to 1 wins the game.

4.5 Get the apples



Suggested duration

40 minutes

Objectives

- Count backwards according to given criteria.

Required resources

- magnetic tortoise
- magnetic flowers
- Additional:
worksheet to identify the position of cheese.

Key terms

apple

backwards

Counting backwards according to given criteria

Activity 1

- Use the whiteboard and magnetic animals to tell a story as in Activity 1, Unit 4.4.
- Draw the following number sequence on the board.



10	9	8	7	6	5	4	3	2	1
----	---	---	---	---	---	---	---	---	---

- Fix a magnetic flower on any of the numbers, for example, 6.
- Explain that the tortoise starts from 10 and wants to get to the flower.
- Ask, 'How many steps backwards must the tortoise take?'
- Ask a pupil to move the tortoise to count the number of steps. Elicit that it is 4 steps.
- Repeat the activity for different numbers of steps.

Activity 2

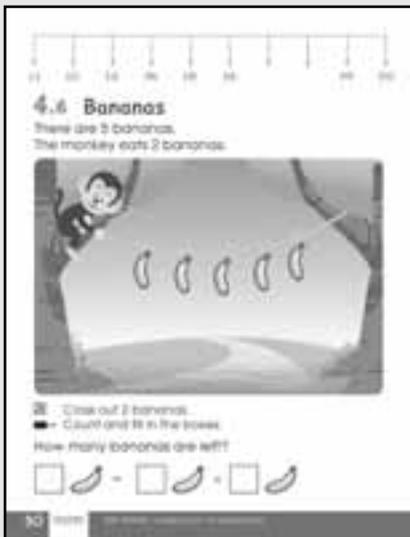
- Ask pupils to look at Activity 4.5.
- Read the statement, 'Tariq and Danyal want to get the apples.'
- Read the instruction, 'Fill in the blanks.'
- Pointing to each footprint, count the footprints together, backwards from 9 to 4. (5) Guide pupils to write 5 in the first blank.
- Read together, 'Tariq must take 5 steps backwards to get the apple.'
- Repeat for Danyal. (4)

Additional activities

Activity 3

- Give each pupil a worksheet showing different sets of mice footprints numbered backwards from 10 to 1.
- For 1 set, tell pupils, 'The mice must take 6 steps backwards to get to the cheese.' Ask pupils to draw the cheese in the correct box.
- Change the number of steps backwards the mice must take for each of the questions and ask the pupils to draw the cheese in the correct box each time.

4.6 Bananas



Suggested duration

1 hour

Objectives

- Relate 'crossing out' to subtraction.

Required resources

- bananas
- Additional:
worksheet to cross out and write the numbers.

Key terms

banana

Relating 'crossing out' to subtraction

Activity 1

- Show the pupils 3 bananas and elicit that, 'There are 3 bananas.'
- Ask a pupil to eat 1 banana and elicit that 1 has been eaten and 2 are left.
- Repeat, eating 2 of 5 bananas. (3 are left)
- Repeat the activity with different pupils and numbers of bananas.

Activity 2

- Ask pupils to describe the picture in Activity 4.6.
- Read the statements, 'There are 5 bananas,' and 'The monkey eats 2 bananas.'
- Read the instruction, 'Cross out 2 bananas.' Ask pupils to do this with pencil.
- Read the instruction, 'Count and fill in the boxes.'
- Elicit through questions that they should write 5 in the first box and 2 in the second box.

- Read the question, 'How many bananas are left?'
- Ask pupils to count the bananas that are not crossed out. (3)
- Guide pupils to write 3 in the third box.
- Write on the board the subtraction sentence ' $5 - 2 = 3$ '.

Additional activities

Activity 3

- Give pupils Worksheet 13 and ask them to cross out and write the numbers.

4.7 Sidra's oranges

Suggested duration

40 minutes

Objectives

- Relate crossing out to subtraction.

Required resources

- sweets
- Additional: worksheet to cross out and write the numbers.

Key terms

orange

Relating 'crossing out' to subtraction

Activity 1

- Give a pupil 5 sweets and ask him/her to give 2 to another pupil.
- Elicit that he/she has 3 sweets left.
- Repeat, asking another pupil to give away 5 of 10 sweets.
- Repeat the activity with different pupils and numbers of sweets.

Activity 2

- Ask pupils to look at Activity 4.7.
- Read the statements, 'Sidra has 7 oranges,' and 'She gives Anum 3 oranges.'
- Read the instruction, 'Cross out 3 oranges.' Ask pupils to do this.
- Read the instruction, 'Count and fill in the boxes.'

- Elicit that they should write 7 in the first box and 3 in the second box.
- Ask pupils to count the oranges that are not crossed out. (4)
- Guide pupils to write 4 in the third box. Read together, 'Sidra has 4 oranges left.'
- Write on the board the subtraction sentence ' $7 - 3 = 4$ '.

Additional activities

Activity 3

- Give pupils Worksheet 14 and ask them to cross out and write the numbers.

4.8 Amir's basket

4.8 Amir's basket

Colour the mangoes.
There are 6 mangoes in the basket.
Amir takes out 1 mango.
How many mangoes are left?

Fill in the boxes.
Count back 1 from 6 to get the answer.

There are ___ mangoes left in the basket.

Suggested duration

40 minutes

Objectives

- Relate counting backwards using fingers to subtraction.

Required resources

- drawing paper
- water colour

Relate counting backwards using fingers to subtraction

Activity 1

- Ask pupils to raise their hands and show numbers 1 to 10 with their fingers.
- Ask them to do the same showing numbers from 10 to 0 by closing one finger each time.

Activity 2

- Ask pupils to look at Activity 4.8.
- Read the instruction, 'Colour all the mangoes.' Ask pupils to colour all the mangoes.
- Read the statements, 'There are 6 mangoes in the basket.' and 'Amir takes out 1 mango.'
- Ask pupils to point to the 1 mango outside the basket.
- Read the question, 'How many mangoes are left?'
- Read the instruction, 'Fill in the boxes.'
- Elicit that they should write 6 in the first box and 1 in the second box.

- Read the sentence, 'Count back 1 from 6 to get the answer.'
- Guide pupils to use their fingers to show 6. Then to close one finger to show 5.
- Guide pupils to write 5 in the third box.
- Write on the board the subtraction sentence ' $6 - 1 = 5$ '.
- Read together, 'There are 5 mangoes left in the basket.'

Additional activities

Activity 3

- Give each pupil a piece of drawing paper and place water colour around the classroom.
- Ask pupils to create prints of both their hands on the paper to show 10.
- Ask pupils to cross out fingers to illustrate the subtraction sentence $10 - 5$
- Ask pupils to complete the subtraction sentence $10 - 5 = \underline{\quad}$, and write it below their work.

Introduction

In this unit, pupils are introduced to the concept of subtraction. By the end of the unit, pupils should be able to subtract by counting backwards, and by using a number line.



Pre-assessment activity

- Revise the numbers 0 to 20 as in previous units.
- Revise counting backwards from 20 – 0.
- Place 10 oranges on the table. Ask pupils to show the number of oranges using their fingers.
- Say that 2 oranges are rotten and remove them from the table. Ask pupils to close 2 fingers to show the subtraction of 2 and ask how many are left. (8)
- Write on the board the subtraction sentence $10 - 2 = 8$.
- Repeat the activity with different numbers of oranges.



5.1 A magician's tools



Suggested duration

40 minutes

Objectives

- Reinforce the terms more and fewer.

Required resources

- lollipops
- Additional: worksheet to match and identify 'fewer' and 'more'

Key terms

magician
wand
hat

Reinforce the terms 'more' / 'fewer'

Activity 1

- Place 5 lollipops on a table and ask 8 pupils to come to the front of the class.
- Ask each pupil to take a lollipop: 3 pupils will not get lollipops.
- Elicit that 'There are more pupils than lollipops.' Ask pupils to repeat the sentence.

Activity 2

- Ask pupils to describe the picture in Activity 5.1.
- Read the sentence, 'The magician has many magic wands and hats.'
- Read the instruction, 'Match each hat to a wand.' Ask pupils to use ruler and pencil to do this.
- Read the instruction, 'Circle the wands that are left.' Elicit that 2 wands are left and ask pupils to circle them.
- Read the instruction, 'Circle the correct answers.'
- Ask if there are more wands or hats. Elicit that there are more wands. Ask pupils to circle 'more' in the first sentence and read together, 'The magician has more wands than hats.'
- Elicit that there are fewer hats than wands. Ask pupils to circle 'fewer' in the second sentence and read together, 'The magician has fewer hats than wands.'

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen a magic show.
- Do they know the magic word the magician says when he waves his wand?

Activity 4

- Give pupils a worksheet showing pairs of sets of objects. There should be more in one set than the other, e.g. mice and pieces of cheese, dogs and bones, etc.
- Ask pupils to match e.g. each mouse to a piece of cheese and say if there are 'fewer' or 'more' of each of the objects in each set.

5.2 Magic numbers



Suggested duration

40 minutes

Objectives

- Counting backwards according to given criteria.

Required resources

- Flashcards of numbers 1 to 10
- Additional:
worksheet with number sequences
dot stickers

Key terms

magician
magic number

Counting backwards according to given criteria

Activity 1

- Place flashcards 10 – 1 in backward sequence on the board.
- Ask e.g. 'What is 2 less than 10?' Show pupils how to find the answer by removing 2 cards (10 and 9) to arrive at 8.
- Elicit that '2 less than 10 is 8.'
- Repeat to find the answer to 3 less than 8.
- Repeat the activity starting from different numbers and asking 'What is ___ less than ___.'

Activity 2

- Ask pupils to look at Activity 5.2.
- Read the statement, 'The magician loves to count backwards to get magic numbers.'
- Read the instruction, 'Circle the magic numbers.'
- Point to the first question and read the statement, 'Count backwards to get 2 less than 4.'
- Ask pupils to place a finger on 4 and move 2 places backwards. Elicit that they are on number 2.
- Ask pupils to circle 2 with pencil.
- Work through the second and third questions together and ask pupils to circle 2 and 4.
- Ask pupils to do the other 2 questions themselves.

Additional activities

Activity 3

- Give pupils coloured dot stickers and a worksheet showing different number sequences from 10 to 1 with different instructions. For example, count backwards to get 5 less than 10.
- Show pupils how to use the stickers to cover the numbers as they count backwards, e.g. to cover 10, 9, 8, 7 and 6 to get 5 less than 10. Pupils can then circle the answer 5.

5.3 Pigeons

Suggested duration

40 minutes

Objectives

- Count backwards.

Required resources

- paper flowers
- Additional:
drawing paper
bird stickers

Key terms

pigeon

Counting backwards

Activity 1

- Play the role of a magician and ask 2 pupils to play the roles of volunteers.
- Give the first pupil 5 paper flowers.
- The second volunteer should ask the magician to make more paper flowers appear. Say a magic word and place 2 flowers in front of the second pupil.
- Ask, 'How many more flowers does Pupil 1 have than Pupil 2?' Explain that you want to know what is 2 less than 5.
- Guide pupils to show 5 fingers, then close 2 fingers to get the answer. (3)
- Ask different pupils to be magicians and volunteers and vary the number of flowers.

Activity 2

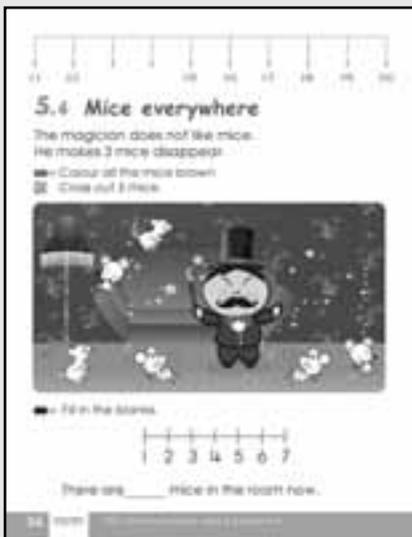
- Ask pupils to describe the picture in Activity 5.3.
- Read the statements, 'Zareen and Sania like pigeons. Sania has no pigeons.'
- Read the statement, 'The magician waves his magic wand and makes 1 pigeon appear.'
- Ask pupils to point to that pigeon.
- Read the instruction, 'Trace the pigeon on Sania's stand.' Ask pupils to trace the pigeon with pencil.
- Read the question, 'How many more pigeons does Zareen have than Sania?'
- Read the instruction, 'Fill in the blanks.'
- Read the statement, 'Count backwards on your fingers to get 1 less than 3.'
- Ask pupils to show 3 fingers, then close one finger. Elicit that they get 2 as an answer.
- Guide the pupils to write the subtraction sentence $3 - 1 = 2$.
- Read together, 'Zareen has 2 more pigeons than Sania.'

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and some bird stickers. Ask them to draw 2 tree branches.
- Ask them to stick 5 bird stickers on the first branch.
- Tell them that 2 more birds land on the second branch. Ask them to stick 2 stickers on the second branch.
- Ask, 'How many more birds are there on the first branch than on the second branch?'
- Pupils should count backwards and share their answers and work with the class.

5.4 Mice everywhere



Suggested duration

40 minutes

Objectives

- Count backwards using a number line.

Required resources

- circular magnet
- Additional:
worksheet using number line to subtract

Key terms

mouse

disappear

Counting backwards using a number line

Activity 1

- Draw a number line from 1 to 10 and 10 birds on the board, and tell the pupils that they are all magicians. Ask them to make-up a magic word.
- Elicit that there are 10 birds and cover the number 10 with the magnet.
- Ask pupils to make one bird disappear. As they say the magic word, erase one bird.
- Ask pupils to count backwards to find out how many birds are left. As they count, move the magnet from 10 to 9 on the number line.
- Elicit that 9 birds are left.
- Repeat the activity until only one bird remains.

Activity 2

- Ask pupils to describe the picture in Activity 5.4.
- Read the statements, 'The magician does not like mice.' and 'He makes 3 mice disappear.'
- Read the instruction, 'Colour all the mice brown.' Ask pupils to count the mice as they colour them.
- Read the instruction, 'Cross out 3 mice.' Ask the pupils to use a pencil to cross out 3 mice.
- Read the instruction, 'Fill in the blanks.'
- Guide pupils to count 3 places back from 6 on the number line. Elicit that they land on number 3.
- Ask them to write 3 in the blank and read together, 'There are 3 mice in the room now.'

Additional activities

Activity 3

- Give pupils a worksheet with a number line at the top and various subtraction questions.
- Ask them to use the number line to solve the subtraction questions.

5.5 Muffins for Ali



Suggested duration

40 minutes

Objectives

- Count backwards according to a given criterion.

Required resources

- chocolates
- Additional: worksheet to count backwards according to a given criterion.

Key terms

muffin

Counting backwards according to given criterion

Activity 1

- Ask 2 pupils to come to the front of the class; give 8 chocolates to pupil 1 and 2 to pupil 2.
- Ask pupil 2 to tell the class, 'I want more chocolates,' if s/he wants more.
- Ask the class to say the magic word and make 2 more chocolates appear for pupil 2.
- Ask, 'How many more chocolates does Pupil 1 have than Pupil 2?'

- Pupils should count backwards using their fingers. They should show 8 fingers and close fingers as they count backwards to 4.
- Ask pupils to show you the answer with their fingers. (4)
- Ask pupils to repeat after you, 'Pupil 1 has 4 more chocolates than Pupil 2.'

Activity 2

- Ask pupils to describe the picture in Activity 5.5.
- Read the statements, 'Amir has 6 muffins.' and 'Ali has 1 muffin.'
- Read the statement, 'The magician makes 2 more muffins appear on Ali's plate.'
- Read the instruction, 'Trace 2 more muffins on Ali's plate.' Ask pupils to use a pencil to trace the 2 muffins.
- Read the instruction, 'Fill in the blanks.' Elicit that they should write 3 in the first blank.
- Read the question, 'How many more muffins does Amir have than Ali?'
- Ask pupils to show 6 fingers and count backwards together 5, 4, 3.
- Guide pupils to write 3 in the second and third blanks.
- Read together, 'Amir has 3 more muffins than Ali.'

Additional activities

Activity 3

- Give each pupil a worksheet showing different sets of questions with apple trees having some apples on the trees and fewer apples on the ground in each set.

5.6 The magician's cats



Suggested duration

1 hour

Objectives

- Identify numbers for subtraction.

Required resources

- felt board and felt animals
- Additional:
worksheet to count the number after subtraction

Key terms

cat

Identifying numbers for subtraction

Activity 1

- Place a felt board in front of the class and tell pupils stories using felt animals. For example, show a pond; tell pupils there are 5 ducks swimming on the pond and place 5 felt ducks on the pond.
- Tell pupils that 2 ducks think the water is cold and came off the pond. Remove 2 ducks.
- Ask, 'How many ducks are on the pond now?' (3)
- Write on the board the subtraction sentence ' $5 - 2 = 3$ '.
- Repeat the activity with other stories and write the subtraction sentence for each of the stories.

Activity 2

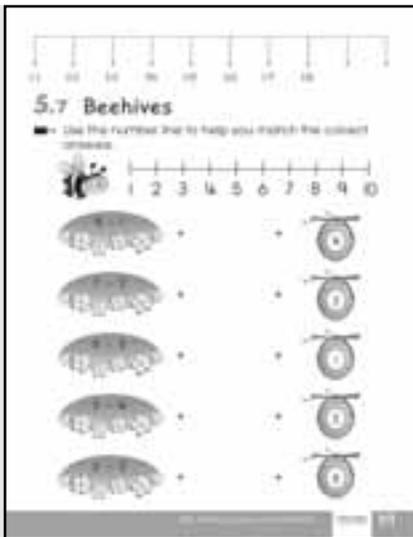
- Ask pupils to describe the picture in Activity 5.6.
- Read the statement, 'The magician has 7 cats.'
- Read the statements, 'His two favourite cats are Tiger and Blackie. He waves his magic wand to make them disappear.'
- Read the instruction, 'Fill in the blanks.' Guide pupils to write 2 in the first blank.
- Read the question, 'How many cats does the magician now have?'
- Ask pupils to count backwards from 7. (6, 5) Guide pupils to write 5 in the second and third blanks.
- Write on the board the subtraction sentence $7 - 2 = 5$.
- Read together, 'The magician now has 5 cats.'

Additional activities

Activity 3

- Supply pupils with Worksheet 15. Ask pupils to subtract and draw the correct number of polka dots on the third card for each question. Also, ask pupils to fill in the blanks.

5.7 Beehives



Suggested duration

40 minutes

Objectives

- Subtract using a number line.

Required resources

- flashcards of subtraction sentences
- Additional:
worksheet to subtract and match

Subtracting using a number line

Activity 1

- Draw a number line on the board.
- Show flashcards with different subtraction sentences as practice. For example, the sentence $5 - 1 =$
- Ask pupils to count backwards from 5 using the number line and give you the answer. (4)
- Ask pupils to form groups of 4 or 5.
- Show flashcards of subtraction sentences; the first pupil to raise a hand and give the correct answer scores a point for his/her group.
- The group with the most points at the end of the activity wins.

Activity 2

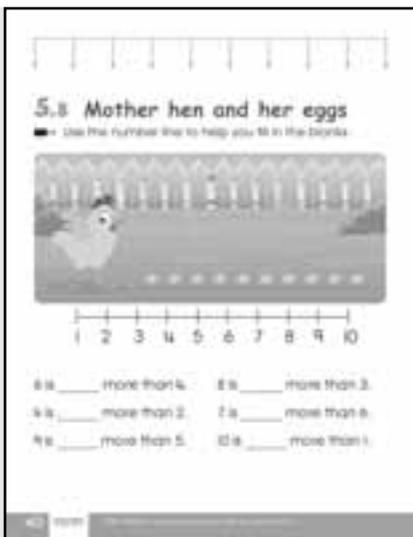
- Ask pupils to look at Activity 5.7.
- Read the instruction, 'Use the number line to help you match the correct answers.'
- Point pupils to the first grass patch, '9 - 1' and ask them to count backwards using the number line.
- Elicit that the answer is 8 and ask them to match the question to beehive 8.
- Work through the second question together. (5)
- Ask pupils to match the rest of the questions and answers themselves.

Additional activities

Activity 3

- Give pupils Worksheet 16 and ask them to subtract and match.

5.8 Mother hen and her eggs



Suggested duration

40 minutes

Objectives

- Relate counting backwards to subtraction.

Required resources

- red and blue marbles
- Additional:
worksheet to subtract and fill in the blanks

Relate counting backwards to subtraction

Activity 1

- Draw a number line from 1 to 10 on the board.
- Place some red and blue marbles on the table and ask 'more than' questions. For example, put 5 red and 3 blue marbles on the table. Ask, 'How many more red marbles are there than blue?'
- Show pupils how to count back from 5 to 3 on the number line and elicit that you have moved back 2 places.
- Tell pupils, 'There are 2 more red marbles than blue marbles.' Ask them to say, '5 is 2 more than 3.'
- Repeat the activity with different numbers of marbles.

Activity 2

- Ask pupils to look at Activity 5.8.
- Read the instruction, 'Use the number line to help you fill in the blanks.'
- Guide pupils through the first question. Ask them to place a finger on number 6 and move backwards to 4. Elicit that they have moved 2 numbers back.
- Guide pupils to write '6 is 2 more than 4.' and ask pupils to repeat this after you.
- Work through 2 more questions together.
- Ask pupils to complete the activity themselves.

Additional activities

Activity 3

- Give pupils Worksheet 17 and ask them to subtract by counting backwards using the number line and then fill in the blanks.

Introduction

In this unit, pupils are required to look back at the concepts they have learned in the previous five units. By the end of the unit, pupils should be able to complete activities related to learned concepts with accuracy and confidence.

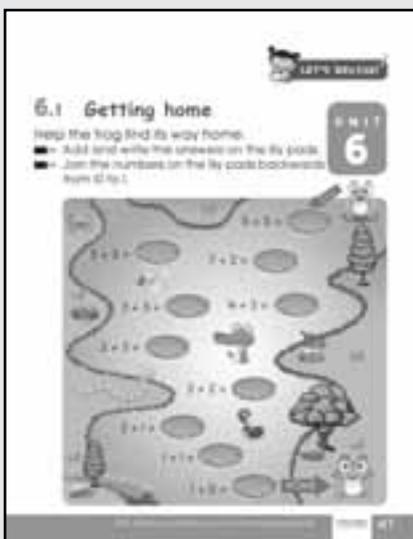


Pre-assessment activity

- Recall and revise with pupils what they have learnt in the previous units: comparing quantities using 'more' or 'fewer'; addition and addition sentences; comparison by height, length, size and weight; counting backwards; subtraction.



6.1 Getting home



Suggested duration

40 minutes

Objectives

- Reinforce addition.
- Counting backwards.

Required resources

- flashcards of addition sentences
- flashcards of numbers 1 to 10
- Additional: worksheet to solve addition sentences and count backwards.

Key terms

frog

lily pad

Reinforcing addition and counting backwards

Activity 1

- Show flashcards of different addition sentences, e.g. $5 + 2$. After pupils have given the correct answer, show the number flashcard. (7)
- Repeat for different addition sentences.
- Ask pupils to arrange the number cards in a backwards sequence from 10 to 1 and recite the sequence of numbers from 10 – 1.

Activity 2

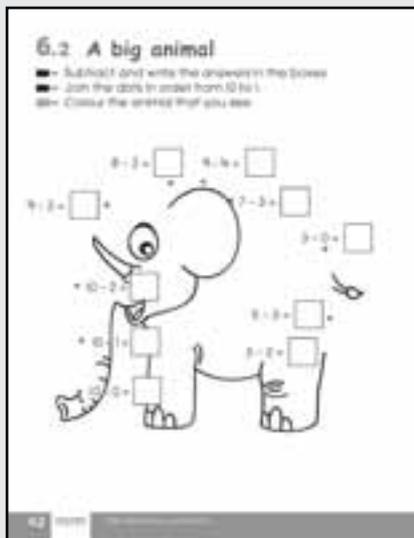
- Ask pupils to describe the picture in Activity 6.1.
- Read the statement, 'Help the frog find its way home.'
- Read the instruction, 'Add and write the answers on the lily pads.'
- Point to the first lily pad and ask pupils to add $5 + 5$. (10)
- Ask pupils to answer the other questions. Their answers should be in the sequence 10 to 1.
- Read the instruction, 'Join the numbers on the lily pads backwards from 10 to 1.'
- Ask pupils to place a finger on the lily pad numbered 10 and trace the numbers back to 1 before joining them with pencil.

Additional activities

Activity 3

- Give pupils Worksheet 18. Ask them to add the numbers in each box and colour the right mouse, then, join the answers from 10 to 1 to help the cat find its way home.

6.2 A big animal



Suggested duration

40 minutes

Objectives

- Reinforce subtraction.

Required resources

- flashcards of addition sentences
- flashcards of numbers 1 to 10
- Additional:
join the dots worksheet

Key terms

animal

Reinforcing subtraction

Activity 1

- Show flashcards of different subtraction sentences and ask pupils to solve them as in Activity 1 in Unit 6.1.
- Ask pupils to arrange the number cards in a backwards sequence from 10 to 1 and recite the sequence of numbers from 10 to 1.

Activity 2

- Ask pupils to look at Activity 6.2.
- Read the instruction, 'Subtract and write the answers in the boxes.'
- Point to the elephant's trunk and ask pupils to answer the sum $10 - 0$. (0)
- Ask them to answer the other questions; the answers should be in the sequence 10 to 1.
- Read the instruction, 'Join the dots in order from 10 to 1.'
- Ask pupils to trace with a finger the sequence of numbers from 10 to 1 before joining the numbers with pencil.
- Read the instruction, 'Colour the animal that you see.'
- Ask pupils to name the animal, (elephant) and colour it.

Additional activities

Activity 3

- Give pupils a join the dots worksheets to practise counting numbers backwards in sequence from 10 to 1.

6.3 What a colourful world

6.3 What a colourful world
■ Fill in the blanks.
■ Colour the pictures with the correct colour.

7 + 2 = red
3 + 2 = green
9 + 1 = blue
8 - 2 = black
8 - 2 = yellow
8 + 1 = brown

Suggested duration

40 minutes

Objectives

- Reinforce addition and subtraction.

Required resources

- flashcards of addition sentences
- flashcards of subtraction sentences
- Additional:
worksheet to colour balloons in given colours

Reinforcing addition and subtraction

Activity 1

- Ask pupils to form groups of 4 or 5.
- Show flashcards of addition and subtraction sentences.
- The first pupil to raise a hand and give the correct answer scores a point for his/her group.
- The group with the most points at the end of the activity wins.

Activity 2

- Ask pupils to describe the picture in Activity 6.3 and talk about the colours of butterflies and parrots.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to solve the addition and subtraction sentences and write the answers in the boxes.
- Read and explain the instruction, 'Colour the pictures with the correct colours.' For example, they should colour all the number 9's red.
- Ask pupils to colour all the parts of the butterfly and parrot in the correct colours.

Additional activities

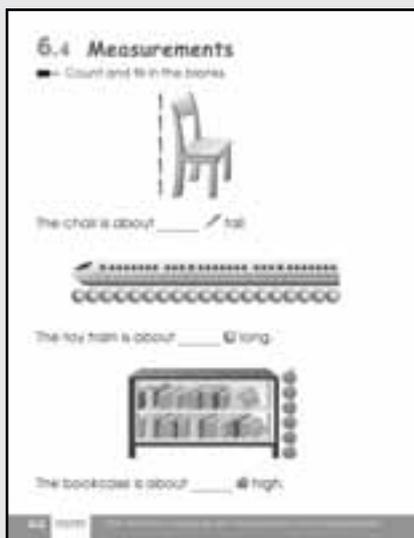
Activity 3

- Ask pupils to name colourful animals.
- They could use the internet to find pictures of more colourful animals.

Activity 4

- Give pupils Worksheet 19. Ask pupils to add and subtract, and then colour the balloons in the correct colours.

6.4 Measurements



Suggested duration

40 minutes

Objectives

- Reinforce measuring with non-standard units of measurement.

Required resources

- pencil
- Additional:
drawing paper

Key terms

chair

toy train

bookcase

Reinforcing measuring with non-standard units of measurement

Activity 1

- Show pupils how to use pencils to measure the lengths of classroom objects. For example, the edge of the table might be 15 pencils long.
- Ask pupils to repeat after you, 'The table is 15 pencils long.'
- Do the same to measure the height of the table, e.g. 6 pencils high.
- Ask pupils to repeat after you, 'The table is 6 pencils high'.
- Ask pupils to measure the lengths and heights of other objects around the classroom using the pencils.

Activity 2

- Ask pupils to look at Activity 6.4.
- Read the instruction, 'Count and fill in the blanks.'
- Look at the first question and ask pupils to count the pencils that line the height of the chair. (5)
- Ask pupils to write 5 in the blank.
- Read together, 'The chair is about 5 pencils tall.'
- Repeat for the toy train and the marbles, (19) and the bookcase and the apples. (6)
- Read together 'The toy train is about 19 marbles long,' and 'The bookcase is about 6 apples high.'

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and ask them to draw the following objects and non-standard units of measurement: a sofa 10 oranges long; a vase 13 paper clips high; an apple tree 15 books tall.
- Ask pupils to include the non-standard units of measurement beside each of the objects.
- Ask pupils to share their drawings with the class.

New Syllabus

PRE-PRIMARY MATHEMATICS TEACHING GUIDE

C2



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Introduction

In this unit, pupils look back at the concepts they learned in the previous book before they start to learn new concepts. By the end of the unit, pupils should be able to apply learnt concepts with accuracy and confidence.



Pre-assessment activity

- Recall and practise the activities the pupils carried out in the previous term: counting on to add, 'how many more', and counting backwards to subtract using a number line



1.1 Baby birds



Suggested duration

40 minutes

Objectives

- Add by counting all.

Required resources

- 3 boxes
- tennis balls and base balls
- Additional:
worksheets to count all to add

Key terms

baby bird
nest

Adding by counting all

Activity 1

- Place 3 boxes in front of class: put 8 tennis balls in the first box and 6 base balls in the second box.
- Ask, 'How many balls are there altogether?'
- Pupils should count as they move the 8 tennis balls into the third box, and count on as they move the 6 base balls into the third box. (14)
- Ask pupils to repeat after you, 'There are 14 balls altogether.'
- Write on the board the addition sentence $8 + 6 = 14$.
- Repeat with 10 tennis balls and 8 base balls.

Activity 2

- Ask pupils to describe the picture in Activity 1.1.
- Read the instruction, 'Count and fill in the blank'.
- Read the statement, 'There are 7 baby birds in the first nest.' Ask pupils to count the red birds
- Ask pupils to count the blue baby birds in the second nest, and write 5 in the blank.
- Read together, 'There are 5 baby birds in the second nest.'
- Read the instruction 'Count onwards from 7 and fill in the blank.', and the question, 'How many baby birds are there altogether?'
- Count on together from 7, (12) Guide pupils to write 12 in the blank.
- Read together, 'There are 12 baby birds altogether.'

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen baby birds.
- Ask pupils to share their experiences and thoughts about baby birds.

Activity 4

- Give pupils worksheet 20 and ask them to count on and write how many altogether.

1.2 Up the stairs

Suggested duration

40 minutes

Objectives

- Count forwards according to given criteria.

Required resources

- felt board and felt animals
- Additional:
worksheet to colour the correct carrot

Key terms

step

Counting forwards according to given criteria

Activity 1

- Place a felt board at the front of the room and place felt animals on the table.
- Ask a pupil to move the felt animals on the board to illustrate the story you are going to tell.
- Say, 'The green frog is on lily pad 1.' The pupil should place the green frog on lily pad 1. Continue the story: 'The frog leaps 3 steps forward.' The pupil should count and move the frog to lily pad 4.
- Elicit that the frog is now on lily pad 4.
- Tell pupils 'The green frog meets a red frog on lily pad 4.' The pupil should place a red frog on lily pad 4.
- Continue the story, 'The red frog leaps 5 steps forward.' The pupil should count and move the frog to lily pad 9. Elicit that the red frog is on lily pad 9.
- Repeat the activity with different stories.

Activity 2

- Ask pupils to describe the picture in Activity 1.2
- Read the statement, 'Nadir is on step 1.' Read the statement, 'He walks up 3 steps.'
- Read the question, 'On what step is Nadir now?'
- Ask pupils to place their index fingers on 1 and move up 3 steps. Elicit that they are pointing to number 4..
- Read the instruction, 'Count 3 steps up and colour the correct step blue.'
- Ask pupils to colour step number 4 blue.
- Read the instruction, 'Fill in the blank.'
- Guide pupils to write 4 in the blank and read together, 'Nadir is on step 4 now.'
- Complete the question about Neha in the same way; students should colour step 7 red.

Additional activities

Activity 3

- Give pupils a worksheet showing 2 different coloured rabbits and a row of carrots numbered 1 to 10.
- Give pupils the following instructions: The white rabbit is at carrot 1. It jumps 5 steps to get the carrot it wants. Colour the carrot that the white rabbit wants yellow. The grey rabbit is at carrot 4. It jumps 4 steps to get the carrot it wants. Colour the carrot that the grey rabbit wants red.

1.3 Sweets and lollipops



Suggested duration

40 minutes

Objectives

- Count on from different numbers.

Required resources

- sweets, chocolates, lollipops, etc.
- Additional:
worksheet to draw more

Key terms

sweet

lollipop

Counting on from different numbers

Activity 1

- Ask 1 pupil to come to the front of the class and give him/her some sweets, e.g. 3.
- Ask the pupil to count and tell the class how many sweets s/he has.
- Put 4 more sweets on the table and ask, 'If I give you 4 more, how many will you have altogether?'
- Encourage the pupil to pick up each sweet and count on from 3. (7)
- Ask the pupil to say, 'I have 7 sweets altogether'.
- Repeat the activity with other pupils and numbers of sweets.

Activity 2

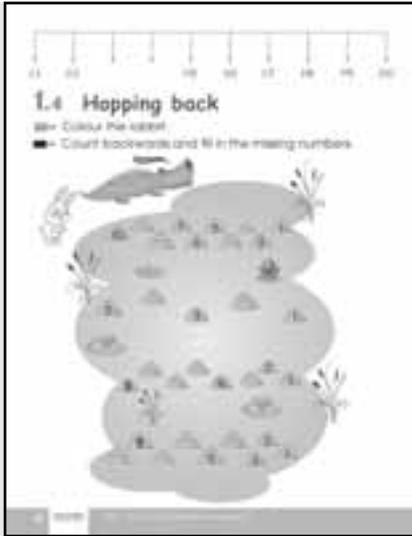
- Ask pupils to look at Activity 1.3.
- Read the statement, 'Nadir has 4 sweets.' Ask them to count the sweets.
- Read the statement, 'He is given 2 more.'
- Read the instruction, 'Colour the 2 sweets.' Ask pupils to colour the 2 sweets.
- Read the instruction, 'Count 2 places forward from 4 and fill in the blank.'
- Ask pupils to count forwards to 6 and write 6 in the blank.
- Read together, 'Nadir has 6 sweets now.'
- Repeat for the lollipops.

Additional activities

Activity 3

- Give pupils Worksheet 21. Ask them to draw more objects to make the correct number.

1.4 Hopping back



Suggested duration

40 minutes

Objectives

- Count backwards in sequence.

Required resources

- flashcards of numbers 1 to 10
- Additional:
worksheet to complete number sequences

Key terms

rabbit

Counting backwards in sequence

Activity 1

- Place flashcard of numbers 1 to 10 on the board in a random sequence.
- Ask pupils to re-arrange the cards so that they are in a backward sequence from 10 to 1.
- The rest of the class checks if the cards are arranged in the correct order.
- Ask pupils to recite the sequence 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

Activity 2

- Ask pupils to describe the picture in Activity 1.4.
- Read the instruction, 'Colour the rabbit.' Ask pupils to colour it.
- Read the instruction, 'Count backwards and fill in the missing numbers.'
- Go through the first sequence starting from 10. Elicit that 9 comes before 10 and ask pupils to write 9 on the stone before 10.
- Repeat for numbers 8, 4, and 3.
- Ask pupils to look at the second question and elicit that the sequence starts from 5 instead of 10.
- Ask pupils to recite the sequence from 5 to 1 or refer to the flashcards as they complete this sequence.
- Complete the remaining tasks in the same way.

Additional activities

Activity 3

- Give pupils a worksheet showing incomplete descending sequences of numbers and ask them to complete the sequences by filling in the blanks.

1.5 Fly away



Suggested duration

40 minutes

Objectives

- Relate 'crossing out' to subtraction.

Required resources

- felt board and felt animals / objects
- Additional:
worksheet to cross out and write the numbers

Key terms

bird

fence

fly away

Relating 'crossing out' to subtraction

Activity 1

- Use a felt board and felt animals / objects to illustrate subtraction stories.
- For example, 'There are 4 rabbits in a garden. 2 rabbits hop away. How many are in the garden now?'
- Elicit the answer 2 and write on the board the subtraction sentence $4 - 2 = 2$.
- Repeat with other stories and subtraction sentences.

Activity 2

- Ask pupils to look at Activity 1.5.
- Read the instruction, 'Count and fill in the blank.'
- Count together the birds sitting on the fence. (6)
- Ask pupils to write 6 in the blank. Read together, 'There are 6 birds on the fence.'
- Read the statement, '2 birds fly away.' Ask pupils to point to the 2 birds that have flown away.
- Read the instructions, 'Cross the birds that fly away.' Ask pupils to use a pencil to do this.
- Read the instruction, 'Fill in the blanks.'

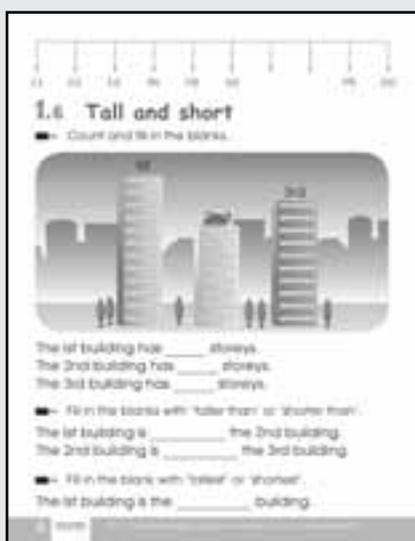
- Read the question, 'How many birds are on the fence now?'
- Ask pupils to count the birds on the fence. (4) Ask them to write 4 in the 2 blanks.
- Read together, 'There are 4 birds on the fence now.'

Additional activities

Activity 3

- Give pupils Worksheet 22. Ask them to cross out the correct number of animals and write the numbers.

1.6 Tall and short



Suggested duration

40 minutes

Objectives

- Compare heights using non-standard units of measurement.

Required resources

- number tags – 1st, 2nd, 3rd
- Additional:
drawing paper (enough for all pupils in the class)

Key terms

building

storey

Comparing heights using non-standard units of measurement

Activity 1

- Ask 3 pupils to stand on one side of the classroom and draw a 'finishing line' on the other side.
- Ask them to race to the finishing line when you say go.
- See which pupils came in 1st, 2nd and 3rd and give them the corresponding number tags.
- Ask the pupils to stand in order of 1st, 2nd and 3rd.
- Ask pupils to talk about the heights of the pupils using the ordinals, e.g. 'The 1st/2nd/3rd pupil is the tallest.', 'The 1st/2nd/3rd pupil is the shortest.' etc.

Activity 2

- Ask pupils to describe the picture in Activity 1.6.
- Read the instruction, 'Count and fill in the blanks.'

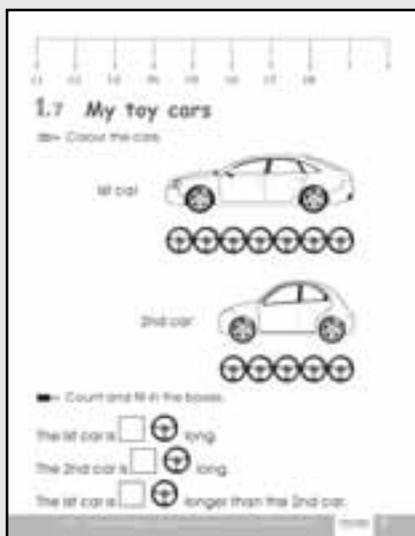
- Point to and count together the storeys of the first building. (12)
- Ask pupils to write 12 in the first blank and read together, 'The 1st building has 12 storeys.'
- Repeat for the second building (8), and the third building (10).
Read the instruction, 'Fill in the blanks with 'taller than' or 'shorter than'.'
- Guide pupils to write 'taller than' in the first blank and read together, 'The 1st building is taller than the 2nd building.'
- Guide pupils to write 'shorter than' in the second blank and read together, 'The 2nd building is shorter than the 3rd building.'
- Read the instruction, 'Fill in the blank with 'tallest' or 'shortest'.'
- Elicit that the first building is the tallest, fill in the blank and read together, 'The 1st building is the tallest building.'

Additional activities

Activity 3

- Give each pupil a piece of drawing paper and ask them to follow these instructions to draw 3 fruit trees.
- The banana tree is the 2nd tree. It is the shortest tree. The mango tree is the 3rd tree. It is taller than the banana tree. The apple tree is the 1st tree. It is the tallest tree.
- Ask pupils to share their drawings with the class.

1.7 My toy cars



Suggested duration

40 minutes

Objectives

- Compare lengths using non-standard units of measurement.

Required resources

- 3 books
- paper clips
- Additional:
worksheet to circle the correct object

Key terms

car

Comparing lengths using non-standard units of measurement

Activity 1

- Place 3 books of different lengths on a table and label them 1st, 2nd and 3rd.
- Line up paper clips along the entire length of the 1st book and ask pupils to count as you do this, e.g. 15. Ask them to repeat after you, 'The 1st book is 15 paper clips long.'
- Repeat for the second book, e.g. 12 paper clips, and the third book, e.g. 10 paper clips.
- Ask pupils to repeat after you, 'The 1st book is the longest; the 2nd book is shorter than the 1st book; the 3rd book is the shortest.'

Activity 2

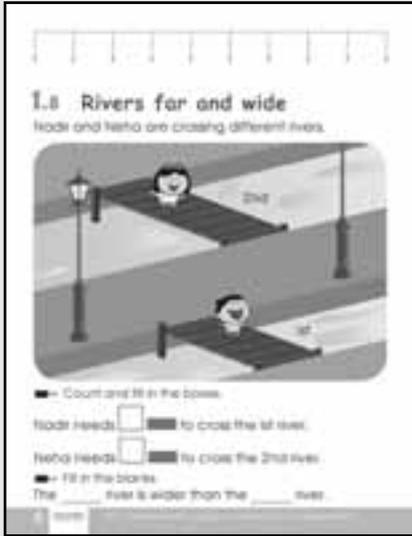
- Ask pupils to look at Activity 1.7.
- Read the instruction, 'Colour the cars.' Ask pupils to do this.
- Read the instructions, 'Count and fill in the boxes.'
- Point to and count together the wheels that line the length of the 1st car. (7)
- Ask pupils to write 7 in the first box and repeat after you, 'The 1st car is 7 wheels long.'
- Repeat for the second car. (5)
- Ask pupils to count backwards to see how many wheels longer the 1st car is than the 2nd car.
- Elicit that the 1st car is 2 wheels longer than the 2nd car and ask pupils to write 2 in the third box.

Additional activities

Activity 3

- Give pupils Worksheet 23. Tell them that Neha's bicycle is 2 wheels longer than Nadir's bicycle. Ask them to count the wheels and circle Neha's bicycle.

1.8 Rivers far and wide



Suggested duration

40 minutes

Objectives

- Compare widths using non-standard units of measurement.

Required resources

- short rulers
- Additional: worksheet to circle objects that are wider

Key terms

cross

river

wider

Comparing widths using non-standard units of measurement

Activity 1

- Use short rulers to measure and compare the lengths of the teacher's table and a pupil's desk.
- Elicit that, e.g. 'The teacher's table is 6 rulers long.', and 'The pupil's desk is 3 rulers long.'

Activity 2

- Ask pupils to describe the picture in Activity 1.8.
- Read the statement, 'Nadir and Neha are crossing different rivers.'
- Read the instruction, 'Count and fill in the boxes.'
- Point to and count together the wooden boards Nadir needs to cross the 1st river. (6) Ask pupils to write 6 in the first box.
- Repeat for the number of boards Neha needs. (8)
- Read the instruction, 'Fill in the blanks.'
- Guide pupils to write, 'The 2nd river is wider than the 1st river.'

Additional activities

Activity 3

- Give pupils a worksheet showing different pairs of objects with one wider than the other, shown by various non-standard units of measurement.
- Ask pupils to circle the object that is wider in each pair.

Introduction

In this unit, pupils are introduced to more addition. By the end of the unit, pupils should be able to solve addition sums by counting forwards, adding objects in groups, and relate 'how many more are needed' to addition.



Pre-assessment activity

- Use flashcards to revise numbers 0 to 20 or ask pupils to show the numbers using their fingers.
- Hold up 2 flashcards with different numbers of objects and revise counting on to find how many are there altogether.
- Repeat the activity with real objects.
- Make up addition stories e.g. 'You have 3 sweets. Your friend gives you 3 more. How many sweets do you have altogether?' or 'There are 5 birds on the branch. 2 birds join them. How many birds are there on the branch altogether?'

2.1 Zain's stationery



Suggested duration

40 minutes

Objectives

- Solve addition sums by counting forwards.

Required resources

- stationery – pencils, pens, rulers, etc.
- Additional: worksheet to draw more and write the number

Key terms

pencil

eraser

Solving addition sums by counting forwards

Activity 1

- Give a pupil some pencils, e.g. 4, and ask him/her to count them and tell the class how many there are.
- Give him/her e.g. 5 more pencils and ask him/her to count on to find how many there are altogether. Ask him/her to say 'I have 9 pencils altogether.'
- Repeat the activity with other pupils and different quantities of items of stationery.

Activity 2

- Ask pupils to look at Activity 2.1.
- Read the statement, 'Zain has 7 pencils and 5 erasers.'
- Ask pupils to count the pencils and erasers to check there are 7 and 5 respectively.
- Read the instruction, 'Count forwards and fill in the blanks.'
- Read the statement, 'His father buys 4 more pencils for him.'
- Ask 'How many pencils does Zain have now?' Guide pupils to count on from 7 and to write 11 in the blanks. Write the addition sentence $7 + 4 = 11$ on the board.
- Read together, 'Zain now has 11 pencils.'
- Repeat for the erasers, counting on from 5 to 12.

Additional activities

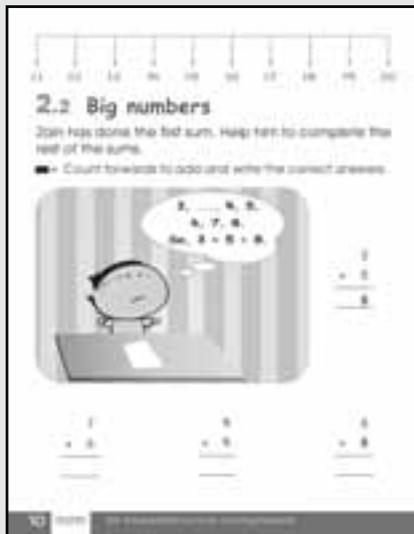
Activity 3

- Ask pupils if they usually buy erasers and pencils or if their parents buy them. Ask them to say if they have received or bought new erasers and pencils recently, and to say how many pencils / erasers they had before, and how many they have now.

Activity 4

- Give pupils Worksheet 24 and ask them to draw more and write the total.

2.2 Big numbers



Suggested duration

40 minutes

Objectives

- Solve addition sums by counting forwards.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to add with dots

Key terms

sum

Solving addition sums by counting forwards

Activity 1

- Show pupils pairs of flashcards of different sets of identical objects, e.g. 7 and 5 pencils.
- Ask pupils to count the total number of pencils, starting from 7 and counting on to 12.
- Elicit that 'There are 12 pencils altogether.'
- Show pupils how to write the addition sentence in a vertical form.
- Say, 'There are 7 pencils.' and write 7 on the board.
- Say, 'Add on 5 pencils.' and write + 5 below 7.
- Say, 'There are 12 pencils altogether.', and write 12 between 2 lines.
- Compare the horizontal and vertical forms of the addition sentences.

Activity 2

- Ask pupils to describe the picture in 2.2.
- Read the statement, 'Zain has done the first sum. Help him to complete the rest of the sums.'
- Ask pupils to point to the first completed sum.
- Read the instruction, 'Count forwards to add and write the correct answers.'
- Ask a pupil volunteer to write the first sum in horizontal form: $7 + 6 = \underline{\quad}$.
- Count forward together from 7 to add. (13) Guide pupils to write 13 between the 2 lines of the vertical addition question.
- Repeat for the second sum. ($9 + 9 = 18$)
- Ask pupils to complete the third sum themselves.

Additional activities

Activity 3

- Give pupils Worksheet 25 and ask them to count on to add.

2.3 Butterflies in the garden



Suggested duration

40 minutes

Objectives

- Grouping objects to make sets of 2.

Required resources

- 20 rulers bundled in groups of 2.
- Additional:
drawing paper

Key terms

butterfly

Grouping objects to make sets of 2

Activity 1

- Prepare 10 bundles of rulers in groups of 2 and ask 10 pupils to come to the front of the class.
- Ask the first pupil to take a bundle of rulers and say how many rulers s/he has. (2) Write 2 on the board.
- The second pupil should take a bundle and count on (3, 4). Write 4 on the board.
- Continue the activity until all 10 pupils have 2 rulers each.
- Count in pairs together 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

Activity 2

- Ask pupils to describe the picture shown in Activity 2.3.
- Read the instruction, 'Circle the butterflies in groups of 2.'
- Guide pupils to count 2 butterflies and use a pencil to draw a circle around them.
- Repeat for 2 more butterflies before asking pupils to circle the other pairs themselves.
- Read the question, 'How many groups of 2 butterflies are there?'
- Ask pupils to count the pairs they have circled. (6)
- Read the instruction, 'Fill in the missing numbers by counting in twos.'
- Explain that pupils can either count the butterflies one by one, or in pairs. (2, 4, 6, 8, 10, 12)
- Guide pupils to write the number sequence 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen butterflies in the garden.
- Ask pupils to share their experiences of butterflies.

Activity 4

- Give each pupil a piece of drawing paper and ask them to draw 20 bees in groups of 2, e.g. 2 on 1 flower, 2 on 1 hive, etc.
- Pupils should share their drawings with the class. Emphasize the sets of 2.

2.4 Ladybirds



Suggested duration

40 minutes

Objectives

- Count in groups and add numbers of groups.

Required resources

- 10 red and 10 blue marbles
- Additional:
drawing paper
glue
felt leaves and ladybirds

Key terms

ladybird
jar
leaf

Counting in groups and adding numbers of groups

Activity 1

- Place 10 red marbles and 10 blue marbles on the table.
- Ask 2 pupils to come to the front of the class to pair up one red marble and one blue marble.
- The first pupil should take one red marble and the second pupil, one blue marble and place them together as a group on the table.
- Ask the class to count as each pair is formed.
- Elicit that there are 10 pairs.

Activity 2

- Ask pupils to describe the picture in Activity 2.4.
- Read the statement, 'Shayaan wants to catch all the ladybirds and put them into a jar.'
- Read the instruction, 'Count in pairs and fill in the blanks.'
- Ask pupils to circle each pair of ladybirds in the jar.
- Elicit that they have drawn 5 circles and ask them to write 5 in the first blank.

- Repeat for the ladybirds on the leaves. (4 pairs)
- Read together, 'There are 5 pairs of ladybirds in the jar and 4 pairs on the leaves.'
- Ask pupils to count how many circles they have drawn altogether. They should count on from 5 to 9.
- Ask pupils to write 9 in the third blank. Read together, 'There are 9 pairs of ladybirds altogether.'

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper, glue, 2 leaves and 10 ladybirds cut out from felt and tell a ladybird story.
- First ask pupils to glue the felt leaves onto the drawing paper.
- Tell them e.g., '3 pairs of hungry ladybirds landed on the first leaf to look for food. 2 pairs of tired ladybirds rested on the second leaf.'
- Ask pupils to illustrate the story by sticking the correct numbers of ladybirds in pairs on the 2 leaves.
- Ask pupils to share their artwork with the class.
- Check if pupils have the correct answer.

2.5 Bees



Suggested duration

40 minutes

Objectives

Group objects to make sets of 3.

Required resources

- rulers bundled up in groups of 3
- Additional:
worksheet to circle groups of 3

Key terms

bee

Grouping objects to make sets of 3

Activity 1

- Prepare 6 bundles of rulers in groups of 3 and ask 6 pupils to come to the front of the class.
- Ask pupils to take turns to take a bundle of rulers.
- Ask the first pupil how many rulers he/she has, and write 3 on the board.

- The second pupil should take a bundle and count on to 6. Write 6 on the board.
- Continue the activity until all 6 pupils have 3 rulers each, and the sequence 3, 6, 9, 12, 15, 18 is written on the board.
- Ask pupils to count in groups of 3 with you: 3, 6, 9, 12, 15, 18.

Activity 2

- Ask pupils to look at Activity 2.5.
- Read the instruction, 'Circle the bees in groups of 3.'
- Guide pupils to count 3 bees and draw a circle around them.
- Repeat for a second group of 3 and ask pupils to circle the other groups of 3 bees themselves.
- Read the question, 'How many groups of 3 bees are there?'
- Ask pupils to count the groups they have circled. (4)
- Read the instruction, 'Fill in the missing numbers by counting in threes.'
- Explain that they can either count the bees one by one, or in threes: 3, 6, 9, 12.
- Guide pupils to write the number sequence 3, 6, 9, 12, 15, 18, 21.

Additional activities

Activity 3

- Give pupils Worksheet 26 and ask them to circle groups of 3.

2.6 Ants in the kitchen

2.6 Ants in the kitchen

11 12 13 14 15 16 17 18 19 20

● Circle the ants in groups of 3.
 ● Fill in the boxes.
 How many groups of 3 ants are on the table?
 groups

How many groups of 3 ants are on the wall?
 groups

● Fill in the blank with 'more' or 'fewer'.
 There are _____ groups of ants on the wall than on the table.

Suggested duration

40 minutes

Objectives

- Count and compare using 'more' and 'fewer'.

Required resources

- worksheet to circle the set that has more

Key terms

ant

table

wall

Counting and comparing using 'more' and 'fewer'

Activity 1

- Ask 6 pupils to stand on the left side of the classroom and 9 pupils to stand on the right.

- Ask the pupils on both sides to form groups of 3.
- Elicit that there are 2 groups of 3 on the left and 3 groups of 3 on the right.
- Elicit that there are 'fewer groups' on the left, and ask the pupils to repeat the phrase.
- Elicit that there are 'more groups' on the right and ask the pupils to repeat the phrase.

Activity 2

- Ask pupils to describe the picture in Activity 2.6.
- Read the instruction, 'Circle the ants in groups of 3.'
- Guide pupils to count 3 ants and circle them in pencil.
- Repeat for a second group and ask pupils to circle the other groups of 3 ants themselves.
- Read the instruction, 'Fill in the boxes.'
- Read the first question, 'How many groups of 3 ants are on the table?'
- Elicit that there are 3 groups and ask pupils to write 3 in the first box.
- Repeat for the second question. (2)
- Read the instruction, 'Fill in the blank with 'more' or 'fewer'.'
- Guide pupils to write 'fewer' in the blank and read together, 'There are fewer groups of ants on the wall than on the table.'

Additional activities

Activity 3

- Give pupils Worksheet 27 and ask them to circle groups of 3, count the groups, and circle the set that has more groups.

2.7 Bees and dragonflies

2.7 Bees and dragonflies

■ Circle the bees in groups of 2.
 ■ Circle the dragonflies in groups of 2.

■ Count and fill in the boxes.
 There are ___ groups of bees.
 There are ___ groups of dragonflies.

■ Count and fill in the boxes.
 How many more groups of bees are needed to make both groups equal in number?
 group is needed.

Suggested duration

40 minutes

Objectives

- Relate 'how many more are needed' to addition.

Required resources

- worksheet to draw more to make equal numbers of groups.

Key terms

bee
dragonfly

Relating 'how many more are needed' to addition

Activity 1

- Ask 6 pupils to stand on the left side of the classroom and 8 pupils to stand on the right.
- Ask both groups to pair up to form groups of 2.
- Elicit that there are 3 groups on the left and 4 groups on the right.
- Elicit that the group with 6 pupils has fewer groups, and the one with 8 pupils has more groups.
- Ask the group on the left to ask some classmates to join them so that they have the same number of groups as the group on the right.
- They should ask 2 pupils to join them. If they are unable to do this, ask them to match the groups; they will realize that one more group of 2 is needed.

Activity 2

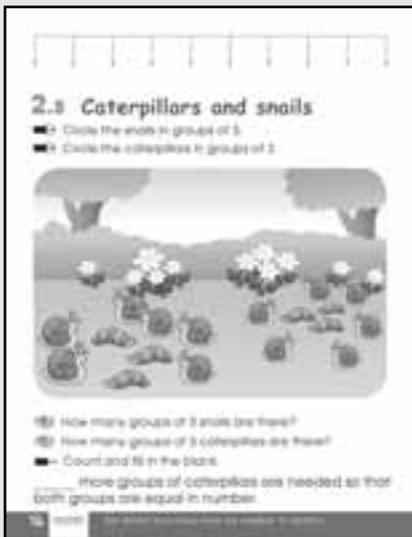
- Ask pupils to look at Activity 2.7.
- Read the instruction, 'Circle the bees in groups of 2.' Guide pupils to circle pairs of bees.
- Read the instruction, 'Circle the dragonflies in groups of 2.' Guide pupils to circle pairs of dragonflies.
- Read the instruction, 'Count and fill in the blanks'.
- Elicit that they have drawn 4 circles round the bees and ask them to write 4 in the first blank.
- Read together, 'There are 4 groups of bees.'
- Ask pupils to fill in the number of groups of dragonflies themselves. (5)
- Read together, 'There are 5 groups of dragonflies.'
- Read the question, 'How many more groups of bees are needed to make both groups equal in number?'
- Elicit that 1 more group is needed.

Additional activities

Activity 3

- Give pupils Worksheet 28. Ask them to circle groups of 2 and draw more on the right to make equal numbers of groups.

2.8 Caterpillars and snails



Suggested duration

40 minutes

Objectives

- Relate 'how many more are needed' to addition.

Required resources

- drawing paper

Key terms

snail

caterpillar

Relating 'how many more are needed' to addition

Activity 1

- Ask 6 pupils to stand on the left side of the classroom and 9 pupils to stand on the right.
- Ask both groups of pupils form groups of 3.
- Proceed as for Unit 2.7 Activity 1 to establish that one more group of 3 is needed for the number of groups on each side to be the same.

Activity 2

- Ask pupils to look at Activity 2.8.
- Read the instruction, 'Circle the snails in groups of 3.' Guide pupils to circle groups of 3 snails.
- Read the instruction, 'Circle the caterpillars in groups of 3.' Guide pupils to circle groups of 3 caterpillars.
- Read the first question, 'How many groups of 3 snails are there?'
- Elicit that there are 4 groups of 3 snails.
- Read the second question, 'How many groups of 3 caterpillars are there?'
- Elicit that there are 2 groups of 3 caterpillars.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that 2 more groups of caterpillars are needed and ask pupils to write 2 in the blank.

Additional activities

Activity 3

- Ask pupils to work in pairs. Give each pair a sheet of drawing paper and ask them to draw a picture of a garden.
- Tell the first pupil to draw 3 groups of 3 butterflies and the second to draw 3 groups of 3 bees.
- Ask them to draw more things in their picture.
- Ask pupils to share their drawings with the class, emphasizing that there is an equal number of groups of butterflies and bees.

- The rest of the pupils check that the order is correct.
- Recite together the sequence – 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

Activity 2

- Ask pupils to look at Activity 3.1.
- Read the instruction, 'Count back and fill in the missing numbers.'
- Point to the first set that has already been done for the pupils. Recite together with the pupils the sequence as you point to each of the numbers, '10, 9, 8, 7, 6, 5, 4, 3, 2, 1'.
- Point to the second set and ask pupils to start with the number '9'. Ask pupils, 'What comes before 9?' etc. until pupils have filled up the number sequence, '9, 8, 7, 6, 5, 4, 3, 2, 1'.
- Point to the third set and tell pupils that each time, they start with 1 number fewer.
- Ask pupils, 'What is 1 number fewer than 9? Or what is the number that comes before 9?' Pupils should say '8'.
- Tell pupils that they should start with 8, and guide pupils to complete the number sequence "8, 7, 6, 5, 4, 3, 2, 1."
- Ask pupils to look at the diagram and elicit that each line is longer than the previous line.
- Ask them to read the first two lines (1 and 1,2) and then elicit that 2,1, should be written after 3 in the third line.
- Ask pupils to write the numbers and then read the sequence.
- Repeat for the fourth line and then ask pupils to complete the remaining sequences themselves.
- Read through all the sequences together.
- Read the instruction, 'Follow the instructions below to colour the squares.'
- Read together, 'Colour the blocks with numbers 10 and 5, red.'
- Ask pupils to point to the blocks numbered 10 and 5 before colouring them red.
- Ask them to complete the colouring themselves in the given colours.

Additional activities

Activity 3

- Give pupils Worksheet 29 and ask them to fill in the missing numbers.

3.2 Going to the market



Suggested duration

40 minutes

Objectives

- Count backwards from 15 to 1.

Required resources

- magnetic numbers from 1 to 15
- magnetic board
- Additional:
join the dots worksheet

Key terms

market

Counting backwards from 15 to 1

Activity 1

- Place some of the magnetic numbers on a magnetic board in an incomplete backward sequence, e.g. 15, 14, __, __, __, 10, __, 8, 7, __, 5, 4, __, 2, __
- Ask pupils to place the correct numbers on the board to complete the sequence.
- Repeat the activity with different missing numbers in the number sequence.

Activity 2

- Ask pupils to look at Activity 3.2.
- Read the statement, 'Anum and her mother are going to the market.'
- Ask pupils to point to Anum, her mother and the market to check contextual understanding.
- Read the instruction, 'Colour Anum and her mother.', and ask them to colour accordingly.
- Read the instruction, 'Join the dots by counting back from 15 to 1 to find their way to the market.'
- Guide pupils to join the dots in the correct sequence, if necessary by asking 'What number comes before ...?'

Additional activities

Activity 3

- Ask pupils to raise their hands if they go to the market with their mother.
- Ask pupils to relate their experiences. Do they like going to the market? Why or why not?

Activity 4

- Give out more join the dots worksheets to practise counting backwards in sequence from 15 to 1.

3.3 At the fish stall



Suggested duration

40 minutes

Objectives

- Practise subtraction of 1.

Required resources

- building blocks
- Additional:
worksheet to practise subtraction of 1.

Key terms

fish

Practising subtraction of 1

Activity 1

- Show pupils 10 building blocks stacked together and ask them to count them.
- Remove 1 building block, saying, 'I remove one, how many are left?' Pupils should count 9.
- Continue removing 1 building block at a time, each time asking how many are left, until 1 building block is left.
- Pupils should realize that they have just recited the number sequence backwards in giving the answers.

Activity 2

- Ask pupils to describe the picture in Activity 3.3.
- Read the statement, 'Anum and her mother are at the fish stall.'
- Read the second statement, 'A lady buys a fish.' Ask pupils to point to the lady and remind them that a fish means 1 fish.
- Read the instruction, 'Count and fill in the box.', and the statement, 'Anum's mother wants to buy a fish.'
- Read the question, 'How many fish are left for Anum's mother to choose from?'
- Elicit that there are 6 fish and write 6 on the board.
- Elicit that the lady bought 1 fish and write '- 1' on the board.
- Ask pupils to count backwards to find out how many fish remain. Guide pupils to write 5 in the box. Read together, '5 fish are left.'
- Write on the board the subtraction sentence $6 - 1 = 5$.

Additional activities

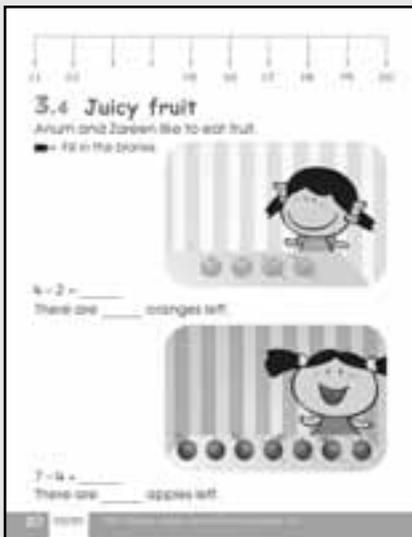
Activity 3

- Ask pupils if they like to go to the fish stall.
- Talk about the fish seller and how many fish they usually buy.

Activity 4

- Give pupils an 'a - 1' worksheet with questions such as, $10 - 1 = \underline{\quad}$, $9 - 1 = \underline{\quad}$, $8 - 1 = \underline{\quad}$, etc. in random order, and ask them to complete the sums.

3.4 Juicy fruit



Suggested duration

40 minutes

Objectives

- Practise simple subtraction by crossing out.

Required resources

- fruits
- small pieces of card
- Additional:
worksheet to cross out and write the numbers.

Key terms

fruit
orange
apple

Practising simple subtraction by crossing out

Activity 1

- Show the pupils 5 oranges and elicit the phrase, 'There are 5 oranges.'
- Tell them that 1 orange is rotten and cover one orange with a piece of card. Explain that covering the orange with the card is the same as crossing out that orange.
- Elicit that 4 oranges are left, and write the subtraction sentence $5 - 1 = 4$ on the board.
- Repeat with 7 apples, 2 of which are rotten. Write the subtraction sentence $7 - 2 = 5$ on the board.
- Repeat the activity with different numbers of fruits, covering the 'rotten' fruits and asking pupils to count the remaining fruits.

Activity 2

- Ask pupils to look at Activity 3.4.
- Read the statement, 'Anum and Zareen like to eat fruit.'
- Ask pupils to identify the fruits that each girl likes to eat.
- Read the instruction, 'Fill in the blanks.'
- Pointing to each of the terms in the subtraction sentence, relate it to the illustration: i.e. $4 =$ the 4 oranges, $-2 =$ the two oranges that are crossed out.
- Elicit that there are 2 oranges left and ask pupils to write 2 in the first and second blanks.
- Read together, 'There are 2 oranges left.'
- Ask pupils to complete the second subtraction themselves and read together, 'There are 3 apples left.'

Additional activities

Activity 3

- Ask pupils to talk about the fruits that they like to eat.
- How many of each fruit do they usually eat?

Activity 4

- Give pupils Worksheet 30 and ask them to cross out the correct numbers and to write the answers.

3.5 Baskets of fruit

3.5 Baskets of fruit

Count back words and write the correct answer.

$$\begin{array}{r} 5 \\ - 2 \\ \hline \end{array}$$

There are _____ pineapples left.

$$\begin{array}{r} 4 \\ - 4 \\ \hline \end{array}$$

There are _____ strawberries left.

Fill in the blanks with 'more' or 'fewer'.

There are _____ pineapples than strawberries left.

There are _____ strawberries than pineapples left.

Suggested duration

40 minutes

Objectives

- Subtract with 'more' or 'fewer'.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to subtract dots

Key terms

pineapple
strawberry

Subtracting with 'more' or 'fewer'

Activity 1

- Show pairs of flashcards of different sets of objects. e.g. 7 mangoes and 5 mangoes.
- Ask how many more mangoes are in the first set than the second.
- If necessary, guide pupils to start from 7 and count backwards to 5 to find how many more (2).
- Introduce writing the subtraction sentence in vertical form.
- Tell pupils 'There are 7 mangoes in the first set.', and write 7 on the board.
- Tell pupils, 'Subtract 5 mangoes from the second set.', and write $- 5$ below 7.
- Tell pupils, 'There are 2 more mangoes.', and write 2 between the 2 lines.
- Compare the horizontal and vertical forms of the subtraction sentence.

Activity 2

- Ask pupils to look at Activity 3.5.
- Read the instruction, 'Count backwards and write the correct answers.'
- Relate each term in the first vertical subtraction sum to the illustration: i.e. 5 = pineapples; -2 = take 2 away. Ask how many pineapples are left. Ask pupils to count backwards from 5 to find out. (3)
- Guide pupils to write 3 between the 2 lines. Read together, 'There are 3 pineapples left.'
- Guide pupils through the second question in the same way. Read together, 'There are 5 strawberries left.'
- Read the instruction, 'Fill in the blanks with 'more' or 'fewer''.
- Guide pupils to write 'fewer' in the first blank and 'more' in the second blank.
- Read together, 'There are fewer pineapples than strawberries left.', and 'There are more strawberries than pineapples left.'

Additional activities

Activity 3

- Give pupils Worksheet 31 and ask them to count and subtract.

3.6 Banana cake



Suggested duration

40 minutes

Objectives

- Subtract by crossing out.

Required resources

- red, blue, yellow, and green marbles
- Additional:
drawing paper

Key terms

banana cake

egg

sugar

flour

milk

Subtracting by crossing out

Activity 1

- Give one pupil a box and tell them that it contains 5 red marbles, 7 blue marbles, 9 yellow marbles and 10 green marbles.
- Ask the pupil to give 2 red marbles to one classmate, 3 blue marbles to another, 5 yellow marbles to the third, and 7 green marbles to the fourth.
- Ask, 'How many red marbles do you have left?' He/she should count and say 3 red marbles are left.
- Repeat for the blue marbles. (4)
- Ask the class to count how many yellow and green marbles are left. (4 and 3)

Activity 2

- Ask pupils to describe the picture in Activity 3.6.
- Read the statements, 'Anum is helping her mother to bake a banana cake.', and 'Her mother needs: 4 bananas, 3 eggs, 3 tablespoons of sugar, 2 cups of flour, 1 glass of milk.' Ask pupils to point to each of these ingredients as they are named.
- Read the instruction, 'Cross out the ingredients that Anum's mother uses.'
- Guide pupils to cross out the correct number of each of the ingredients.
- Read the instruction, 'Count and fill in the blanks.'
- Guide pupils to count the ingredients that remain and fill in the blanks.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have helped their mother to bake.
- Tell pupils to talk about their experiences of baking.

Activity 4

- Ask pupils to work in pairs and give each pair a sheet of drawing paper.
- Ask the first pupil to draw 7 spoons, 5 packets of rice, 10 bowls and 9 glasses.
- Tell the following story and ask the second pupil to cross out the correct numbers of items: Father and mother take 2 spoons. 3 packets of rice are put away in the storeroom. 5 bowls dropped on the floor and broke. Brother has friends at home and takes 5 glasses of water them.
- Ask how many of each item remain.
- Ask pupils to share their drawings with the class.

3.7 Pieces of cake

3.7 Pieces of cake

Anum and Zareen have 9 slices of cake each.

Anum eats 1 of her slices of cake.
Anum has _____ slices of cake left.

Zareen eats 3 of her slices of cake.
Zareen has _____ slices of cake left.

Count and fill in the box.

How many more slices of cake should Anum eat so that she and Zareen have an equal number of slices left?

Print slices

Suggested duration

40 minutes

Objectives

- Associate 'how many more' with addition.

Required resources

- Additional:
worksheet to cross out more to make equal numbers.

Key terms

cake
slice

Associating 'how many more' with addition

Activity 1

- Ask 5 pupils to stand on the left side of the classroom and 5 more on the right.
- Ask 2 pupils from the left and 4 from the right to go back to their seats.
- Elicit that the group on the right has fewer pupils than the one on the left.
- Ask the group on the left to send more pupils back to their seats until the group is the same size as the group on the right. (2 pupils)
- If necessary, help them to do this by matching the groups.

Activity 2

- Ask pupils to look at Activity 3.7.
- Read the statement, 'Anum and Zareen have 5 slices of cake each.' Ask pupils to count the slices of cake.
- Read the instruction, 'Fill in the blanks'.
- Read the statement, 'Anum eats 1 of her slices of cake.' Ask pupils to cross out 1 slice of cake and count the remaining slices.
- Ask pupils to write 4 in the first blank and read together, 'Anum has 4 slices of cake left.'
- Read the statement, 'Zareen eats 3 of her slices of cake.' Repeat the activity and read together 'Zareen has 2 slices of cake left.'
- Read the instruction, 'Count and fill in the box.', and the question, 'How many more slices of cake should Anum eat so that she and Zareen have an equal number of slices left?'
- Help pupils to count backwards from 4 to find the number and ask pupils to write 2 in the box.

Additional activities

Activity 3

- Give pupils Worksheet 32 and ask them to cross out objects from the sets on the right to make the two sets equal.

3.8 In the kitchen

3.8 In the kitchen
Anum is washing the plates and Zareen is washing the cups.

■ Fill in the blanks.
There are 6 plates.
Anum has washed 3 plates.
How many more plates does she have to wash?
 $6 - 3 = \dots$

There are 5 cups.
Zareen has washed 2 cups.
How many cups are left to be washed?
 $5 - 2 = \dots$

Suggested duration

40 minutes

Objectives

- Subtract with number stories.

Required resources

- felt board and felt animals
- Additional:
drawing paper

Key terms

plate

cup

Subtracting with number stories

Activity 1

- Tell subtraction stories and ask pupils to illustrate them by moving the felt animals on the board. For example, 'There are 5 rabbits.' (Pupil 1 places 5 rabbits on the board.) '2 rabbits hop away.' (Pupil 2 removes 2 rabbits.)
- Elicit that 3 rabbits remain and write the subtraction sentence $5 - 2 = 3$ on the board.
- Repeat with different stories and different pairs of students.

Activity 2

- Ask pupils to look at Activity 3.8.
- Read the sentence, 'Anum is washing the plates and Zareen is washing the cups.' Ask pupils to point to the cups and plates.
- Read the instruction, 'Fill in the blanks.', and the first number story, 'There are 6 plates. Anum has washed 3 plates. How many more plates does she have to wash?'
- Ask pupils to count the plates left in the sink, and guide them to write 3 in the blank.
- Write the subtraction sentence $6 - 3 = 3$ on the board.
- Read the second number story, 'There are 5 cups. Zareen has washed 2 cups. How many more cups are left to be washed?'
- Ask pupils to count the cups in the sink, and guide them to write 3 in the second blank.
- Write the subtraction sentence $5 - 2 = 3$ on the board.

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper.
- Tell s a subtraction story and ask them to illustrate the story and write the number sentence.
- Pupils should share their drawings with the class.

Introduction

In this unit, pupils are introduced to the ordinal numbers 1st to 10th. By the end of the unit, pupils should be able to recognize ordinal numbers in figures and words, use ordinal numbers to rank things, and order the months of the year.



Pre-assessment activity

- Carry out this activity in the corridor, or on the school field, or running track. Mark start and finishing lines and ask pupils to race against each other to see who is the fastest.
- Say 'Go' to start the race and give the first 10 pupils to finish ordinal number cards corresponding to their positions. As each pupil finishes, say, e.g. 'Congratulations! You are first!' and hand him/her the card that says '1st'.
- Ask pupils to stand in a line in order from 1st to 10th and hold up their ordinal number cards.
- Point to each pupil in turn and ask the pupils to repeat the ordinal numbers 1st to 10th.

4.1 Children's Day



Suggested duration

1 hour

Objectives

- Use ordinal numbers 1st to 10th correctly.

Required resources

- 10 objects
- flashcards of 1st to 10th

Key terms

Children's Day

sack race

Using ordinal numbers 1st to 10th correctly

Activity 1

- Line up 10 objects on a table at the front of the room.
- Pick up the first object and ask pupils to repeat after you '1st'; place the flashcard 1st in front of the object.
- Repeat for all 10 items and flashcards.

- Ask pupils to point to the items and cards and recite the ordinal numbers 1st to 10th three times.
- Ask questions, e.g. 'In which position is the book?'

Activity 2

- Ask pupils to describe the picture in Activity 4.1.
- Read the statements, 'The school celebrates Children's Day. Maria takes part in the sack race and comes in 8th.'
- Ask pupils to point to the 8th position to identify Maria.
- Read the instruction, 'Colour Maria.' Ask pupils to colour Maria.

Additional activities

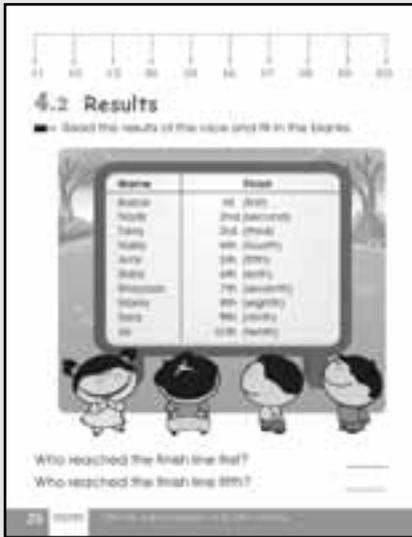
Activity 3

- Ask pupils to raise their hands if they like Children's Day.
- Discuss how Children's Day is usually celebrated in your school.
- Which is the pupils' most memorable Children's Day and what did they do on that day?
- How would they like Children's Day to be celebrated?

Activity 4

- Play a game of 'Steal the bone'.
- Ask pupils to form 2 groups of 10 and stand in 2 rows of 10 on either side of the room, facing each other. Tell them who is 1st and who is 10th in line and ask them to call out their positions in the line in order from 1st to 10th.
- Place an object between the 2 rows of pupils.
- When the pupils are ready, call out a position and the pupils in that position should run forward to steal the 'bone'.
- The pupil who steals the 'bone' and run back to his group scores a point for the group.
- The group with the most points at the end of the game wins.

4.2 Results



Suggested duration

40 minutes

Objectives

- Use ordinal numbers 1st to 10th correctly.

Required resources

- felt board and felt animals
- Additional:
worksheet to match ordinal numbers
glue
scissors

Key terms

result

race

Using ordinal numbers 1st to 10th correctly

Activity 1

- Place a felt board in front of the class and give pupils some felt animals.
- Tell pupils the positions of the animals and ask them to fix them in a line on the board in the correct order.
- For example, say, 'The lion is first.' The pupil holding the lion should fix the lion on the board.
- Continue naming the animals in sequence and asking pupils to fix them in order until the 10th animal.
- Ask, 'Which animal is the first in line?' or 'Which animal is the 8th in line?' etc.

Activity 2

- Ask pupils to look at Activity 4.2.
- Read the instruction, 'Read the results of the race and fill in the blanks.'
- Read the first question 'Who reached the finish line first?'
- Ask pupils to read the name on the board next to the 1st position, (Babar) and write Babar in the first blank.
- Read the second question, 'Who reached the finish line fifth?'
- Ask pupils to find the correct name and write it in the second blank. (Amir)

Additional activities

Activity 3

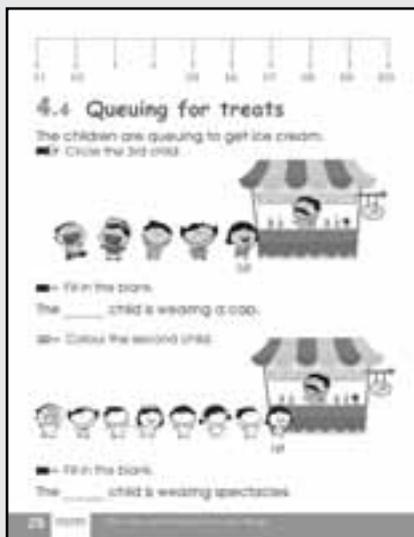
- Give pupils Worksheet 33 and supply scissors and glue.

Additional activities

Activity 3

- Ask pupils to work in groups of 4 or 5 to play a matching game for ordinal numbers in figures and in words.
- Shuffle the flashcards (1st to 10th and first to tenth) and place them face down on the floor.
- Pupils take turns to match each ordinal number to its word. If the cards match, they keep both cards; if not, the cards are returned face down.
- The game ends when all the cards have been matched; the pupil with most cards wins the game.

4.4 Queuing for treats



Suggested duration

40 minutes

Objectives

- Use ordinal numbers to rank things.

Required resources

- 10 different objects
- Additional:
worksheet to identify the correct item

Key terms

children
queue
ice cream
cap
spectacles

Using ordinal numbers to rank things

Activity 1

- Line up 10 different objects on the floor in front of the class.
- Identify the objects in first and tenth position.
- Ask a pupil to stand behind e.g. the fourth object. The rest of the class checks if he is correct.
- Repeat for different positions and pupils until there is a pupil behind each object.

Activity 2

- Ask pupils to look at Activity 4.4.
- Read the statement, 'The children are queuing to get ice cream.' Ask questions to check comprehension and identify the first child in the queue.

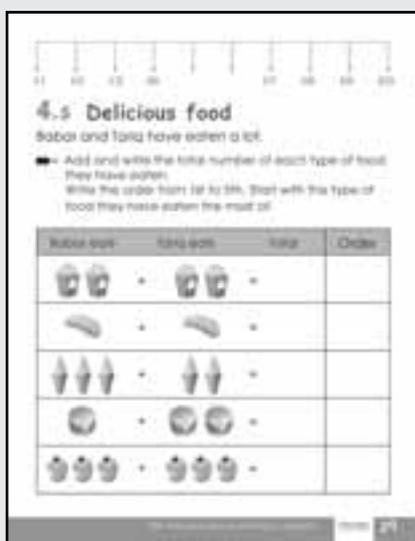
- Read the instruction, 'Circle the 3rd child.'
- Ask pupils to point to the 3rd child, and circle him in pencil.
- Read the instruction, 'Fill in the blank.'
- Ask pupils to point to the child wearing a cap and count together to find his position. (4th)
- Ask pupils to write 4th in the blank
- Ask pupils to look at the second queue, and read the instruction, 'Colour the second child.'
- Ask pupils to point to the second child and colour him.
- Read the instructions, 'Fill in the blank.'
- Ask pupils to point to the child wearing spectacles and count his position. Ask pupils to write 8th in the blank.

Additional activities

Activity 3

- Give pupils Worksheet 34 and ask them to complete it as directed.

4.5 Delicious food



Suggested duration

40 minutes

Objectives

- Add and rank according to quantity.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to rank according to quantity (starting with the most)

Key terms

food

Adding and ranking according to quantity

Activity 1

- Show pupils flashcards of different sets of objects and ask them to identify and count the objects, e.g. 5 cakes, 7 shoes, etc.
- Show the pupils how to arrange them in order from 1st to 5th, starting with the largest set, e.g. 10 items, 8 items, 7 items, 5 items, 2 items.
- Write above each flashcard 1st, 2nd, 3rd, 4th, 5th respectively.

Activity 2

- Ask pupils to look at Activity 4.5.
- Read the statement, 'Babar and Tariq have eaten a lot.'
- Read the instruction, 'Add and write the total number of each type of food they have eaten.'
- Point to and count together the tubs of popcorn that Babar and Tariq have eaten. (4)
- Ask pupils to write 4 in the total column.
- Guide pupils to write the totals for hotdogs, ice creams, burgers, and cup cakes. (2;5;3;6; respectively)
- Read the instruction, 'Write the order from 1st to 5th. Start with the type of food they have eaten the most of.'
- Help pupils to order them correctly from most to fewest.

Additional activities

Activity 3

- Give each pupil Worksheet 35 and ask them to write 1st, 2nd, 3rd, and 4th in the respective boxes, starting with the most.

4.6 Leftover food

4.6 Leftover food

There is some food left over after the celebration.

Count the leftover food and write the numbers.

Write the order from 1st to 5th. Start with the set with the fewest items of food left.

	<input type="checkbox"/>	pieces	
	<input checked="" type="checkbox"/>	pieces	1st
	<input type="checkbox"/>	pieces	

Suggested duration

1 hour

Objectives

- Subtract and rank according to quantity.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to rank according to quantity (starting with the fewest).

Key terms

leftover food

Subtracting and ranking according to quantity

Activity 1

- Show flashcards of different sets of objects and ask pupils to identify and count the objects.
- Continue as for Activity 1 in Unit 4.5. but arrange the cards in order from fewest to most, e.g. 2 items, 5 items, 6 items, 7 items, 8 items, 10 items.

Activity 2

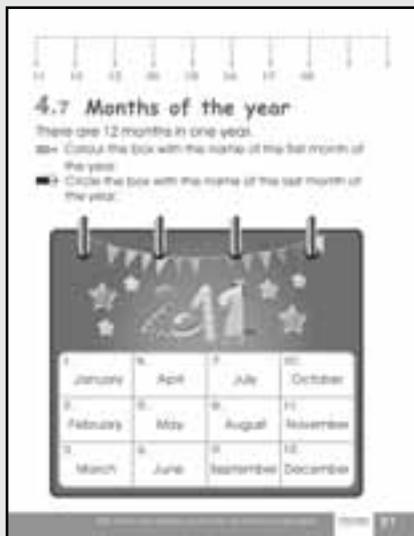
- Ask pupils to look at Activity 4.6.
- Read the statement, 'There is some food left over after the celebration.'
- Read the instruction, 'Count the leftover food and write the numbers.'
- Guide pupils to count the food items not crossed out and write the totals in the boxes. Remind them that crossing out relates to subtraction.
- Guide pupils to order them correctly from fewest to most.
- Point out that unit 4.5 required them to write 1st to 5th in figures, and unit 4.6 requires them to write first to sixth in word form.

Additional activities

Activity 3

- Give pupils Worksheet 36 and ask them to write first to fourth starting with the fewest.

4.7 Months of the year



Suggested duration

40 minutes

Objectives

- Know the names and order of months of the year.

Required resources

- calendar
- Additional:
drawing paper (enough for all pupils)

Key terms

month

year

Knowing the names and order of months of the year

Activity 1

- Show pupils a calendar and explain that it shows the months of the year.
- Show the first page and ask pupils to say, 'The first month of the year is January.'
- Introduce all the months in the same way; each time, pupils should repeat, 'The ___ month of the year is ___.'
- Elicit that the last month is December and that there are 12 months in one year.

Activity 2

- Ask pupils to look at Activity 4.7.
- Read the statement, 'There are 12 months in one year.'
- Ask pupils to count as they point to the name of each month.
- Read the instruction, 'Colour the box with the name of the first month of the year.'
- Ask pupils to point to the first month of the year and name the month.
- Then, ask pupils to colour the box that says January.
- Read the instruction, 'Circle the box with the name of the last month of the year.'
- Ask pupils to point to the last month of the year and name the month.
- Then, ask pupils to colour the box that says December.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have calendars at home.
- Do pupils know how to read the calendars?
- Show pupils a calendar and help them to point out their birthdays.

Activity 4

- Give each pupil a sheet of drawing paper on which to draw their own calendar.
- Ask them to draw 12 boxes and write the name of one month in each of the boxes.
- They should decorate their calendars in the most creative way.
- Ask pupils to share their calendars with the class.

4.8 Order of the months

4.8 Order of the months

Match the name of each month to its correct order in the year.

1st month	August
2nd month	December
3rd month	September
4th month	July
5th month	October
6th month	February
7th month	November
8th month	June
9th month	March
10th month	January
11th month	April
12th month	May

Suggested duration

40 minutes

Objectives

- Know the names and order of the months of the year.

Required resources

- flashcards of 1st to 12th
- flashcards of January to December

Key terms

month

year

Know the names and order of the months of the year

Activity 1

- Show the flashcard of January, elicit that it is the first month of the year and show the flashcard that says 1st.
- Repeat for each month of the year.
- Ask e.g., 'What is the fifth month of the year?' Pupils should say 'May'.
- Practise the order of the months by asking pupils to name the 1st month, 2nd month, etc.

Activity 2

- Ask pupils to look at Activity 4.8.
- Read the instruction, 'Match the name of each month to its correct order of the year.'
- Ask pupils to name the first month and to match '1st month' in the left column to 'January' in the right column using a pencil and ruler.
- Repeat for each of the months.

Additional activities

Activity 3

- Ask pupils to form groups of 4 or 5 and give each group 2 sets of flashcards – flashcards from 1st to 12th and flashcards from January to December.
- Shuffle the cards and lay them face down on the floor.
- Pupils take turns to flip over 2 cards. If the cards match, pupils keep both cards; if not, the cards are returned face down.
- The pupil with the most cards at the end of the activity wins.

Introduction

In this unit, pupils learn about capacity and compare the capacities of different objects. By the end of this unit, pupils should be able to use non-standard units to measure capacity, compare volume, and determine 'how many more'.



Pre-assessment activity

- Use sand to measure the capacity of some containers of various sizes.
- Hold up two containers at a time and ask which container will hold more. To check, fill one container with sand and then pour the sand into the second container. If it overflows, it means the first container is larger; if there is still space, it means the second container is larger.
- Repeat the activity with different pairs of containers. Encourage pupils to explain their predictions.



5.1 Going camping



Suggested duration

40 minutes

Objectives

- Use non-standard units of measurement for capacity / volume.

Required resources

- different sized containers
- marbles
- Additional:
drawing paper (enough for all pupils in the class)

Key terms

camp
pack
trip

Using non-standard units of measurement for capacity / volume

Activity 1

- Place containers that are obviously different in size on a table and ask pupils to predict which will hold more marbles.
- Check their predictions by filling each container with marbles, counting the marbles as you do.
- Pupils should compare the numbers of marbles to decide which holds more. of
- Ask pupils to repeat after you, e.g., 'The second container can hold more.'
- Repeat the activity with other pairs of containers.

Activity 2

- Ask pupils to describe the picture in Activity 5.1.
- Read the statements, 'Sania and Sidra are going camping. They are packing for the trip.'
- Read the instruction, 'Count the objects each girl is putting into her bag and then fill in the blanks.'
- Point to and count together the items that Sidra will pack.(7)
- Repeat for Sania's items. (10)
- Ask pupils to point to the bag that will hold more objects. (Sania's bag)
- Elicit that Sania's bag is yellow and Sidra's bag is orange.
- Guide pupils to fill in the blanks and read together 'The yellow bag will hold more objects than the orange bag.'

Additional activities

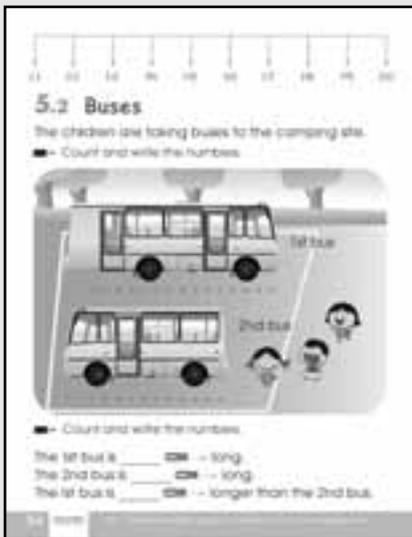
Activity 3

- Ask pupils to raise their hands if they have been to camp.
- Do they like camping?
- Ask pupils to relate their camping experiences.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw a bag.
- Ask them to draw any number of each of the following in their bags: water bottles, shoes, books
- Pupils should compare their work with their classmates to discuss whose bag holds more items.

5.2 Buses



Suggested duration

40 minutes

Objectives

- Compare lengths using non-standard units of measurement.

Required resources

- objects of different lengths
- erasers
- Additional:
worksheet to compare lengths using non-standard units of measurement

Key terms

children

bus

camping site

Compare lengths using non-standard units of measurement

Activity 1

- Prepare objects of different lengths, for example, a red book and blue book and erasers.
- Explain that you want to use erasers to measure their lengths.
- Place the shorter, e.g. red book on the table and lay erasers along the entire length of the book. (e.g. 10 erasers).
- Ask pupils to repeat after you, 'The red book is 10 erasers long.'
- Repeat with the blue book. (e.g. 20 erasers)
- Ask pupils to repeat after you, 'The blue book is 20 erasers long.'
- Guide pupils to repeat after you, 'The blue book is 10 erasers longer than the red book.'

Activity 2

- Ask pupils to describe the picture in Activity 5.2.
- Read the statement, 'The children are taking buses to the camping site.'
- Read the instruction, 'Count and write the numbers.'
- Ask pupils to count the screwdrivers beside the first bus. (17)
- Ask pupils to write 17 in the first blank and read together, 'The 1st bus is 17 screwdrivers long.'
- Repeat for the second bus. (13)
- Help pupils to count how many more screwdrivers long the first bus is than the second.
- Guide pupils to write 4 in the third blank.

Additional activities

Activity 3

- Ask pupils how they usually travel to camping sites. Do their parents drive or do they go by bus?
- Do they know how many pupils can fit into the bus they take to camping sites?

Activity 4

- Give pupils a worksheet showing pairs of objects and non-standard units of measurement below to measure their lengths.
- Ask pupils to count the non-standard units for each object and write how much longer one is than the other.

5.3 Big and small tents



Suggested duration

1 hour

Objectives

- Compare height and capacity using non-standard units of measurement.

Required resources

- 2 different containers, one taller than the other but with the same base area
- Additional:
worksheet to circle the one that can hold more water

Key terms

tent

shape

Comparing height and capacity using non-standard units of measurement

Activity 1

- Show pupils 2 different containers, A and B, with the same base area but of different heights. Ask which container can hold more water.
- Fill container A to the brim with water. Then pour all the water from container A into container B.
- Pupils should observe that there is still space in container B.
- Elicit that 'Container B can hold more water than container A.'
- Pupils should try the activity themselves. If they fill container B to the brim with water and pour all the water into container A, the water will overflow.
- Ask pupils to repeat after you, 'Container B can hold more water than container A.'

Activity 2

- Ask pupils to describe the picture in Activity 5.3.
- Read the statement, 'The tents have different shapes.'
- Read the instruction, 'Fill in the blank with 'taller' or 'shorter'.'
- Guide pupils to write 'taller' in the blank and read together 'The boys' tent is taller than the girls' tent.'
- Read the statements, '12 boys can stay in the boys' tent.', and '8 girls can stay in the girls' tent.'
- Ask pupils to count the boys and girls to check.
- Read the instruction, 'Compare the two tents and fill in the blanks with boys' or girls'.'
- Elicit that the boys' tent can hold more people than the girls' tent and ask pupils to fill in the blanks and read the sentence.

Additional activities

Activity 3

- Give pupils Worksheet 37 and ask them to circle the container in each set that can hold more.

5.4 Bowls of noodles

5.4 Bowls of noodles
The children are eating noodles.

Count and fill in the blanks.
The 1st box can hold 12 bowls of noodles.
How many more bowls of noodles are needed to fill the 1st box?
 $8 + \underline{\hspace{2cm}} = 12$

Fill in the blanks with 'more' or 'less'.
The 2nd box can hold _____ bowls of noodles than the 1st box.

Suggested duration

40 minutes

Objectives

- Practise simple addition.

Required resources

- box which can hold 12 muffins
- 12 muffins
- Additional:
worksheet to draw more to fill it up

Key terms

noodle

bowl

Practise simple addition

Activity 1

- Show the pupils a box and tell them that it can hold 12 muffins.
Place 8 muffins in the box and show pupils that there is still space in the box.
- Elicit that 4 more muffins are needed to fill the box.
- Confirm this by placing 4 more muffins into the box. Show pupils that the box is full.

Activity 2

- Ask pupils to describe the picture in Activity 5.4.
- Read the statement, 'The children are eating noodles.'
- Read the instruction, 'Count and fill in the blank.'
- Read the statement, 'The 1st box can hold 10 bowls of noodles.'
- Elicit that there are 6 bowls of noodles inside the box.
- Read the question, 'How many more bowls of noodles are needed to fill the first box?'
- Ask pupils to count on from 6 to 10 and write 4 in the blank.
- Read the instruction, 'Fill in the blank with 'more' or 'fewer'.'
- Ask pupils to count how many bowls of noodles the 2nd box can hold. (12)
- Guide pupils to write 'more' in the blank.

Additional activities

Activity 3

- Give pupils Worksheet 38 and ask them to draw more to fill the containers.
- The box can hold 12 cakes.
- The container can hold 9 marbles.

5.5 Water containers



Suggested duration

40 minutes

Objectives

- Compare volume using non-standard units of measurement.

Required resources

- different containers

Key terms

water
river
container

Comparing volume using non-standard units of measurement

Activity 1

- Place a wide variety of containers around the classroom, e.g. a cup, a large bucket, a basin, etc.
- Ask pupils to use the containers to fill a larger vessel, e.g. a bowl. They should realize that smaller containers must be filled many times more than the bucket to fill the bowl.
- Pupils should repeat the activity using different containers.

Activity 2

- Ask pupils to describe the picture in Activity 5.5.
- Read the statement, 'The girls are going to get water from the river.'
- Read the question, 'Which containers should they choose?'
- Read the instruction, 'Circle the 2 containers that can hold the most water.'
- Ask pupils to circle the 2 containers with the largest capacities.

Additional activities

Activity 3

- Ask pupils to form groups of 4 to play a game.
- Give the 4 pupils containers of different capacities and ask them to stand in the four corners of the classroom.
- Fill the first pupil's container with water (this should have the smallest capacity).
- When the teacher says 'go', the first pupil has to race to the second pupil and pour his/her water into the second pupil's container. The second pupil then takes the water to the third pupil's container and the third pupil to the fourth in the same way. Finally, the fourth pupil pours the water back into the first pupil's container.
- Measure the amount of water in the first pupil's cup for all the groups and the group with the most water remaining wins.

5.6 Boiling Water



Suggested duration

40 minutes

Objectives

- use non-standard units of measurements to determine 'how many more'.

Required resources

- bowl
- small cup
- Additional: worksheets to colour more.

Key terms

kettle

mug

Use non-standard units of measurements to determine 'how many more'

Activity 1

- Place a bowl in front of the class and ask pupils to predict how many cups of water would be needed to fill it
- Ask pupils to count as cups of water are poured into the bowl until it is full.
- Repeat the activity with bowls and cups of different capacities.

Activity 2

- Ask pupils to look at the picture in Activity 5.6.
- Read the statement, 'Sidra wants to boil water. She fills the kettle with 3 mugs of water.'
- Read the statement, 'The kettle can hold 7 mugs of water.'
- Read the question, 'How many more mugs of water are needed to fill the kettle?'
- Ask pupils to count on from 3 to find the number. (4)
- Read the instruction, 'Fill in the blanks.' Ask pupils to write 4 in both the blanks.
- Read with the pupils, '4 more mugs of water are needed to fill up the kettle.'

Additional activities

Activity 3

- Give pupils Worksheet 39 and ask them to shade/colour more to fill the glasses/cups.

5.7 Tea time



Suggested duration

40 minutes

Objectives

- Use non-standard units of measurement to determine 'how many more'.

Required resources

- kettle
- small cups
- Additional: drawing paper

Key terms

kettle
water
tea

Use non-standard units of measurement to determine 'how many more'

Activity 1

- Place a kettle in front of the class. Ask pupils to predict how many cups can be filled from it.
- Fill cups with the water from the kettle until it is empty. Pupils should count the full cups.
- Repeat the activity with kettles and cups of different capacities.

Activity 2

- Task pupils to describe the picture in Activity 5.7
- Read the statement, 'The kettle holds enough water to make 10 cups of tea.'
- Read the statement, 'Sidra makes 2 cups of tea for herself and Sania.'
- Read the instruction, 'Fill in the blanks.', and the question 'How many more cups of tea can be made from the water in the kettle?'
- Ask pupils to count backwards from 10, and guide them to write 8 in the blanks.
- Read together, '8 more cups of tea can be made.'

Additional activities

Activity 3

- Ask pupils to work in pairs and give each pair of pupils a sheet of drawing paper.
- Ask the first pupil to draw a rectangular basin and 5 cups.
- Tell the second pupil, 'The rectangular basin can hold 15 cups of water. Draw more cups to fill the basin.'
- Check that the second pupil has drawn 10 more cups.

5.8 Going home



Suggested duration

40 minutes

Objectives

- Compare capacity using non-standard units of measurement.

Required resources

- different containers with respective things inside
- Additional:
worksheets to circle the set with more or fewer.

Key terms

bus

children

home

Comparing capacity using non-standard units of measurement

Activity 1

- Show pupils containers of different capacities, e.g. one holding 10 marbles and the other 15.
- Pupils should count the marbles and say which container holds more.
- Ask pupils to repeat, 'This container can hold more marbles'.
- Repeat the activity with different containers and objects, so that pupils can compare capacities.

Activity 2

- Ask pupils to look at Activity 5.8.
- Read the statement, 'There are 2 buses to take the children home.'
- Read the statement, '15 children can fit in the 1st bus.' Ask pupils to count the children.
- Read the statement, '10 children can fit into the 2nd bus.' Ask pupils to count the children.
- Read the instruction, 'Fill in the blank with 'more' or 'fewer'.'
- Guide pupils to write 'fewer' in the blank and read together, 'The 2nd bus holds fewer children than the 1st bus.'

Additional activities

Activity 3

- Give pupils Worksheet 40 and ask them to circle the one which can hold more/fewer.

Introduction

In this unit, pupils look back at the concepts they learned in the previous five units. By the end of the unit, pupils should be able to complete activities related to learned concepts with accuracy and confidence.



Pre-assessment activity

- Recall the activities carried out in the previous five units: addition by counting forwards, counting backwards in sequence, relating crossing out to subtraction, and comparing height, length and width using non-standard units of measurement.



6.1 Pastries



Suggested duration

40 minutes

Objectives

- Addition by counting forwards.

Required resources

- flashcards of different sets of objects
- Additional: worksheet to count, write the addition sentence and write the number

Key terms

pastry

Addition by counting forwards

Activity 1

- Show pairs of flashcards of different sets, e.g. 7 biscuits and 5 biscuits, and ask pupils to count on from 7 to find the total number of biscuits. (12)
- Write the addition sentence on the board $7 + 5 = 12$. Repeat the activity using different pairs of flashcards.

Activity 2

- Ask pupils to look at Activity 6.1.
- Read the statement, 'Farhan bought 6 pastries.', and ask the pupils to count the pastries.
- Read the statement, 'His mother made 8 pastries for him'. Ask them to count the pastries on the tray.

- Read the question, 'How many pastries does Farhan have altogether?'
- Read the instruction, 'Count forwards from 6 and fill in the blanks'. Count together. (14)
- Ask pupils to write 14 in the 2 blanks and read together, 'Farhan has 14 pastries altogether.'

Additional activities

Activity 3

- Give pupils Worksheet 41 and ask them to count, write the addition sentence, and fill in the blanks.

6.2 Water bottles

6.2 Water bottles
 Colour 3 water bottles red and 5 water bottles blue.

Circle the correct answer.
 There are more / fewer blue water bottles than red water bottles.

Fill in the blanks.
 How many more blue water bottles are there than red ones?
 There are ____ blue water bottles.
 There are ____ red water bottles.
 $5 - 3 = \underline{\quad}$
 There are ____ more blue water bottles than red water bottles.

Suggested duration

40 minutes

Objectives

- Reinforce 'how many more' / 'fewer than' by subtraction.

Required resources

- red and blue marbles
- Additional:
worksheet to colour and write the numbers.

Key terms

water bottle

Reinforce 'how many more' / 'fewer than' by subtraction

Activity 1

- Show pupils 5 red marbles and 7 blue marbles.
- Elicit by a show of hands that there are fewer red marbles than blue marbles.
- Ask pupils to count the red and blue marbles and count backwards to find how many more blue there are. (2)
- Ask pupils to repeat after you, 'There are 2 more blue marbles than red marbles.'
- Write the subtraction sentence on the board: $7 - 5 = 2$.

Activity 2

- Ask pupils to look at Activity 6.2.
- Read the instruction, 'Colour 3 water bottles red and 5 water bottles blue.' Ask pupils to do this.
- Read the instruction, 'Circle the correct answer.'

- Guide the pupils to circle 'more' and read together, 'There are more blue water bottles than red water bottles.'
- Read the instruction, 'Fill in the blanks.'
- Read the question, 'How many more blue water bottles are there than red ones?'
- Guide pupils to write 5 in the first blank and read together, 'There are 5 blue water bottles.'
- Guide pupils to write 3 in the second blank and read together with pupils, 'There are 3 red water bottles.'
- Ask pupils to count backwards from 5 and write 2 in the third and fourth blanks.
- Read together, 'There are 2 more blue water bottles than red water bottles.'

Additional activities

Activity 3

- Give pupils Worksheet 42 and ask them to colour the correct number of objects, complete the subtraction sentence, and fill in the blanks.

6.3 Nadir's sweets

6.3 Nadir's sweets

Nadir has 5 packets of sweets.

■ Colour the packets with 5 sweets purple.

■ Colour the packets with 3 sweets green.

Nadir gives Tariq the purple packets.
He gives Isala the green packets.

■ Match Tariq and Isala to the packets they are given.



■ Fill in the blanks.

How many more sweets does Tariq get than Isala?

Tariq gets ___ sweets and Isala gets ___ sweets

Tariq gets ___ more sweets than Isala.

Suggested duration

40 minutes

Objectives

- Subtract by number stories.

Required resources

- sweets
- Additional:
drawing paper

Key terms

packet

sweet

Subtracting by number stories

Activity 1

- Ask 3 pupils, A, B, and C, to come to the front of the class.
- Give pupil A 3 packets of 3 sweets each and 2 packets of 5 sweets each.
- Ask pupil A to give the packs of 3 sweets to pupil B, and the packs of 5 sweets to pupil C.
- Ask pupil B, 'How many sweets do you have?' The pupil can count in 3's or to count on from 3. (9)
- Ask pupil C, 'How many sweets do you have?' The pupil can count in 5's or to count on from 5. (10)

- Ask the pupil who has more sweets to raise his/her hand. Pupil C should raise his/her hand.
- Ask the pupil who has fewer sweets to raise his/her hand. Pupil B should raise his/her hand.
- Ask 'How many more sweets does pupil C have than pupil B?'
- Write the subtraction sentence on the board, $10 - 9 = 1$.
- Ask pupils to repeat after you, 'Pupil C has 1 more sweet than pupil B'.

Activity 2

- Ask pupils to look at Activity 6.3.
- Read the statement, 'Nadir has 5 packets of sweets.'
- Read the instruction, 'Colour the packets with 4 sweets purple.' Ask pupils to do this.
- Read the instruction, 'Colour the packets with 2 sweets green.' Ask pupils to do this.
- Read the statements, 'Nadir gives Tariq the purple packets. He gives Naila the green packets.'
- Read the instruction, 'Match Tariq and Naila to the packets they are given.'
- Ask pupils to match the purple packets to Tariq and the green to Naila using pencil and ruler.
- Read the instruction, 'Fill in the blanks.'
- Read the question, 'How many more sweets does Tariq get than Naila?'
- Ask pupils to count the sweets Naila gets, (6) and write 6 in the first blank.
- Repeat for Tariq's sweets. (8)
- Guide pupils to write the subtraction sentence $8 - 6 = 2$.
- Read together, 'Tariq gets 2 more sweets than Naila.'

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper.
- Tell a subtraction story and ask them to draw a picture and write the subtraction sentence.
- For example, Zareen has 16 balloons. She gives Naila 10 balloons and Amir 6 balloons. How many more balloons does Naila have than Amir?

6.4 Nadir at the park



Suggested duration

40 minutes

Objectives

- Subtraction by number stories.

Required resources

- felt board and felt animals
- Additional:
worksheet to write the subtraction sentence by looking at the number story.

Key terms

bird

tree

fly away

Subtraction by number stories

Activity 1

- Place a felt board at the front of the room. Ask pupils to move the felt animals as you tell a subtraction story. For example, place 2 felt leaves on the board. Tell pupils, 'There are 17 snails on a leaf.' Ask pupils to come to the felt board and place 17 snails on the felt leaves.
- Continue with the story, '8 snails crawled away.' Ask pupils to remove 8 snails from the felt leaves.
- Ask, 'How many snails are left?' Pupils should count.
- Write the subtraction sentence $17 - 8 = 9$ on the board.

Activity 2

- Ask pupils to describe the picture in Activity 6.4.
- Read the statement, 'Nadir is counting the birds on the tree.'
- Read the instruction, 'Fill in the blanks.'
- Count together the birds on the tree. Ask pupils to write 9 in the first blank.
- Read the statement, '3 birds fly away.', and the question, 'How many birds are left?'
- Guide pupils to write the subtraction sentence $9 - 3 = 6$.
- Read together '6 birds are left.'

Additional activities

Activity 3

- Give pupils Worksheet 43. Ask them to look at the picture, form a subtraction story and write the subtraction sentence.

New Syllabus

PRE-PRIMARY MATHEMATICS TEACHING GUIDE

C3



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Introduction

In this unit, pupils look back at the concepts they learned in the previous book before they start to learn new concepts. By the end of the unit, pupils should be able to apply these concepts with accuracy and confidence.

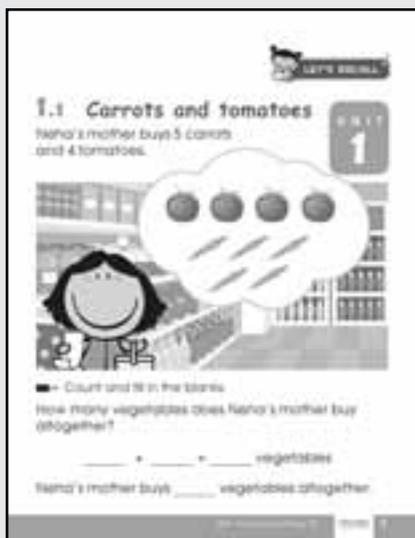


Pre-assessment activity

- Recall and revise concepts pupils learned in the previous term: counting in groups of 3; subtraction stories; subtraction sentences; ordinals 1st to 5th; most and fewest; capacity.



1.1 Carrots and tomatoes



Suggested duration

40 minutes

Objectives

- Add by counting all.

Required resources

- 3 boxes
- tomatoes
- carrots
- Additional: worksheets to count all to add

Key terms

carrot
tomato

Adding by counting all

Activity 1

- Place 3 boxes in front of the class. Put 8 tomatoes in the first box and 6 carrots in the second.
- Ask, 'How many vegetables are there altogether?' Ask pupils to count the 8 tomatoes from the first box into the third box, and count on as they add the 6 carrots. (14)
- Ask pupils to repeat after you, 'There are 14 vegetables altogether.'
- Write on the board the addition sentence $8 + 6 = 14$.
- Repeat with, e.g. 11 tomatoes in the first box and 7 carrots in the second. (18)

Activity 2

- Ask pupils to describe the picture in Activity 1.1.
- Read the statement, 'Neha's mother buys 5 carrots and 4 tomatoes.'
- Read the instruction, 'Count and fill in the blanks.'
- Read the question 'How many vegetables does Neha's mother buy altogether?'
- Elicit that there are 5 carrots and ask pupils to write 5 in the first blank.
- Elicit that there are 4 tomatoes and ask pupils to write 4 in the second blank.
- Ask pupils to count on from 5 to find the total number of vegetables. (9)
- Write on the board the addition sentence $5 + 4 = 9$ vegetables.
- Ask pupils to write 9 in the third and fourth blanks. Read together, 'Neha's mother buys 9 vegetables altogether.'

Additional activities

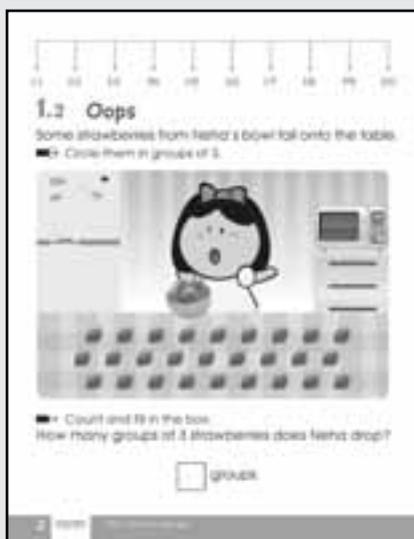
Activity 3

- Ask pupils to raise their hands if they go to the supermarket with their mother to buy vegetables.
- Encourage pupils to count the number of vegetables their mother buys the next time they go.

Activity 4

- Give pupils Worksheet 44.
- Ask them to count on and write the addition sentence.

1.2 Oops



Suggested duration

40 minutes

Objectives

- Count in groups.

Required resources

- sweets
- small plastic bags
- Additional:
worksheet to circle and count groups of 3

Key terms

strawberry
bowl
table

Counting in groups

Activity 1

- Place 5 small plastic bags and 15 sweets in a bowl on the table.
- Ask 5 pupil volunteers to each place 3 sweets into each of the bags.
- Elicit that there are 5 bags and ask, 'How many chocolates are there altogether?'
- Encourage pupils to count in 3's – 3, 6, 9, 12, 15.
Say, 'There are 15 chocolates altogether.'

Activity 2

- Ask pupils to describe the picture in Activity 1.2.
- Read the statement, 'Some strawberries from Neha's bowl fall onto the table.'
- Read the instruction, 'Circle them in groups of 3.'
- Guide pupils to count 3 strawberries and circle them in pencil.
- Repeat for a second group of 3.
- Ask pupils to circle the other groups of 3 strawberries themselves.
- Read the instruction, 'Count and fill in the box.'
- Read the question, 'How many groups of 3 strawberries does Neha drop?'
- Ask pupils to count how many groups they have circled. (9)
- Ask pupils to write 9 in the box.

Additional activities

Activity 3

- Give pupils Worksheet 45.
- Ask them to circle groups of 3 in each set.

1.3 How many are left?

The worksheet shows a subtraction problem: 'Sonia's mother needs 2 carrots and 2 tomatoes to make soup.' Below this, there are two groups of vegetables: a group of 5 carrots and a group of 4 tomatoes. The instruction is to cross out the correct number of each vegetable needed. Below the groups, there are two boxes for the answer: 'Carrots are left' and 'Tomatoes are left'.

Suggested duration

40 minutes

Objectives

- Subtract by crossing out.

Required resources

- fruits
- small pieces of card
- Additional:
worksheet to cross out and write the subtraction sentence

Key terms

carrot
tomato

Subtracting by crossing out

Activity 1

- Show students 5 carrots and 8 tomatoes and ask them to say, 'There are 5 carrots and 8 tomatoes.'
- Tell them you want to make carrot and tomato soup, but you only need 3 carrots and 5 tomatoes.
- Use a small piece of card to cover 3 carrots. Ask pupils to count the remaining carrots. (2) (Explain that covering with the card is the same as crossing out.)
- Write on the board the subtraction sentence $5 - 3 = 2$.
- Repeat, covering 5 tomatoes and ask, 'How many tomatoes are left?' (3)
- Write on the board the subtraction sentence $8 - 5 = 3$.

Activity 2

- Ask pupils to describe the picture in Activity 1.3.
- Read the statement, 'Neha's mother needs 2 carrots and 2 tomatoes to make soup.'
- Read the instruction, 'Cross the correct number of each vegetable needed.'
- Ask pupils to cross out 2 carrots and 2 tomatoes.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to count the tomatoes Neha's mother has at first. (4) Ask them to write 4 in the first blank.
- Elicit that they crossed out 2 and ask them to write 2 in the second blank.
- Ask 'How many tomatoes are left?' (2)
- Guide pupils to complete the subtraction sentence $4 - 2 = 2$.
Read together, '2 tomatoes are left.'
- Ask pupils to write the subtraction sentence for the number of carrots left themselves.

Additional activities

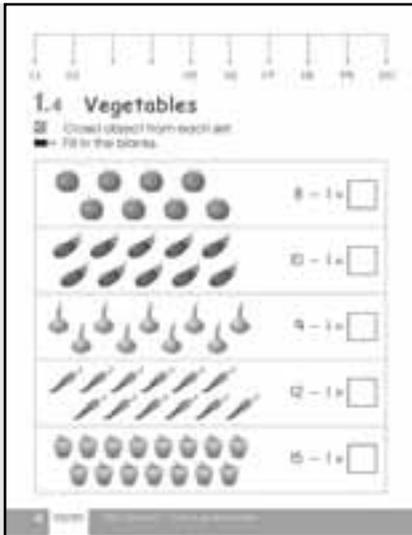
Activity 3

- Ask pupils to raise their hands if their mother makes vegetable soup.
Do pupils like vegetable soup?

Activity 4

- Give pupils a worksheet showing sets of fruits/vegetables. Ask them to cross out a certain number of each and write the subtraction sentence to show how many of each are left.

1.4 Vegetables



Suggested duration

40 minutes

Objectives

- Subtract 1 from a given number.

Required resources

- flashcards of numbers 1 to 20
- Additional:
paper plate
coloured dots

Subtracting 1 from a given number

Activity 1

- Show the flashcard of 20 and ask pupils 'What is 1 less than 20?' Pupils should say 19.
- Place the flashcard of 19 on the board and write the subtraction sentence $20 - 1 = 19$.
- Ask, 'What is 1 less than 19?' Pupils should say 18.
- Place the flashcard of 18 on the board and write the subtraction sentence $19 - 1 = 18$.
- Continue until you reach the flashcard 1 and have written $2 - 1 = 1$.
- Point to the backward sequence of numbers and explain that each number is 1 less than the previous number.

Activity 2

- Ask pupils to look at Activity 1.4.
- Read the instruction, 'Cross 1 object from each set.'
- Ask pupils to count the set of tomatoes. (8) Ask them to cross out 1 tomato.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to count the tomatoes not crossed out, (7) and write 7 in the box.
- For reinforcement, write on the board the subtraction sentence $8 - 1 = 7$. Repeat for the set of aubergines. ($10 - 1 = 9$) Ask pupils to complete the remaining questions themselves.

Additional activities

Activity 3

- Give each pupil a paper plate and some coloured dots. Identify pupils as 1st, 2nd, etc for this activity.

- Ask the 1st pupil to paste 20 coloured dots on his / her plate, and say 'I have 20 coloured dots.'
- Ask the 2nd pupil to paste 20 – 1 coloured dots on his / her plate, and say, 'I have 19 coloured dots.'
- Pupils take turns to repeat the activity; stress the concept of ' $___ - 1 = ___$ ' each time.

1.5 Let's set the table



Suggested duration

40 minutes

Objectives

- Use ordinal numbers correctly.

Required resources

- flashcards of 1st to 10th
- Additional:
worksheet to colour the correct colour based on the ordinal position

Key terms

table
dinner
shelf

Using ordinal numbers correctly

Activity 1

- Give 10 pupils the flashcards 1st to 10th in random order and ask them to line up in order from 1st to 10th at the front of the classroom.
- Ask questions relating to the order of the pupils. For example, 'Which pupil has long hair? Which pupil wears spectacles?' 'Describe the 4th pupil', etc.

Activity 2

- Ask pupils to describe the picture in Activity 1.5 and explain the term 'setting the table'.
- Read the statement, 'Neha is setting the table for dinner.'
- Read the instruction, 'Colour the objects on the fourth shelf.'
- Ask pupils to point to the fourth shelf and identify and colour the teapots.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to point to the plates to identify the shelf they are on. (2nd) Ask them to write 'second' in the first blank.
- Repeat for the bowls. (1st/first)

Additional activities

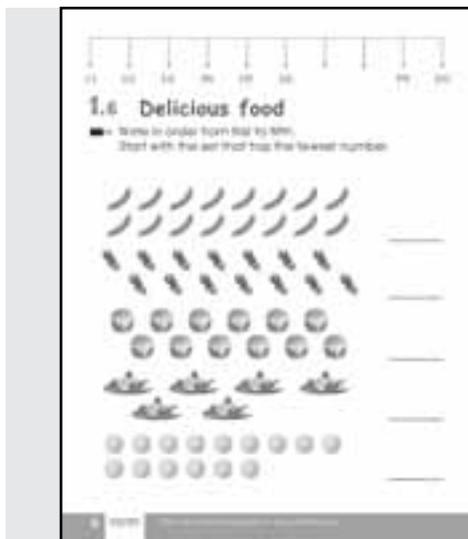
Activity 3

- Ask pupils to raise their hands if they help their parents set the table.
- Encourage pupils to say where the crockery and cutlery are kept.

Activity 4

- Give pupils Worksheet 46.
Ask them to read the sentences and colour the lights based on their ordinal positions, counting from the bottom.

1.6 Delicious food



Suggested duration

40 minutes

Objectives

- Use ordinal numbers to rank sets by size.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to rank from fewest to most
Note – text should say 'the set that has the fewest' – not 'has the fewest number'

Using ordinal numbers to rank sets by size

Activity 1

- Show pupils flashcards of sets of objects and ask them to identify and count the objects, e.g. 10 burgers, 8 French fries, 15 nuggets, 18 grilled chickens and 20 ice creams.
- Ask which card shows the fewest items, (8 French fries) and place it first on the board.
- Help pupils to arrange the rest of the cards from fewest to most on the board – 8 French fries, 10 burgers, 15 nuggets, 18 grilled chickens, 20 ice creams.
- Write above each flashcard 1st, 2nd, 3rd, 4th, 5th respectively.

Activity 2

- Ask pupils to look at Activity 1.6.
- Read the instruction, 'Write in order from first to fifth. Start with the set that has the fewest'.
- Count together the sausages (16), vegetable kebabs (14), and burgers (12).
- Ask them to count the other 2 sets themselves.

- Ask them to identify the set with fewest items, (6 plates of chicken) and write first in the blank.
- Repeat for the set with second fewest items, (burgers).
Ask pupils to order the rest of the sets of food items themselves.

Additional activities

Activity 3

- Give pupils Worksheet 47.
Ask them to write first to fourth in the boxes, starting with the fewest.

1.7 Soup



Suggested duration

40 minutes

Objectives

- Use non-standard units for measurement of capacity.

Required resources

- kettle
- cups
- Additional:
worksheet to draw the correct number of cups

Key terms

bowl
soup

Using non-standard units for measurement of capacity

Activity 1

- Bring a kettle filled with water and some small cups to class.
- Fill the cups from the kettle until it is empty and ask pupils to count the cups, e.g. 8.
Show the empty kettle and elicit that 'The kettle can hold 8 cups of water.'
- Give 2 pupils a cup of water each and ask them to drink it.
Ask, 'How many cups of water are left?' (6)

Activity 2

- Ask pupils to look at Activity 1.7.
- Read the statement, 'This pot can hold 12 bowls of soup.' Ask pupils to count the bowls.
- Read the second statement, 'Neha and her family eat 6 bowls of soup.'
- Read the instruction, 'Cross the number of bowls that Neha and her family eat'.

- Ask pupils to count and cross out 6 bowls of soup.
- Read the instruction, 'Count and fill in the blanks.' and the question 'How many bowls of soup are left?'
- Ask pupils to count the bowls of soup that are not crossed out and write 6 in the 1st and 2nd blanks.
- Ask them to write 6 in the 3rd blank and read together, '6 bowls of soup are left.'

Additional activities

Activity 3

- Give pupils Worksheet 48.
Ask them to draw the correct number of cups.

1.8 Ice cream



Suggested duration

40 minutes

Objectives

- Subtract to find out how many are left.

Required resources

- sweets
- Additional:
worksheet to cross out and find how many are left

Key terms

ice cream cone

Subtracting to find out how many are left

Activity 1

- Give 1 pupil 20 sweets. Ask him/her to give 1 sweet to 10 other pupils.
- Ask the pupil to count the sweets he/she has left.
- Write on the board the subtraction sentence $20 - 10 = 10$.
- Repeat the activity varying the number of sweets at the start and the number of sweets given away.
- Ask pupils to write the corresponding subtraction sentences on the board.

Activity 2

- Ask pupils to look at Activity 1.8.
- Read the statement, 'Neha and her family eat 7 ice cream cones.'
- Read the instruction, 'Cross the ice cream cones that Neha and her family eat.'
- Ask pupils to count and cross out 7 ice cream cones.
- Read the instruction, 'Count and fill in the blanks.'
- Ask, 'How many ice cream cones were there at first?' (15) Ask pupils to write 15 in the first blank.
- Ask, 'How many ice cream cones are crossed out?' (7) Ask pupils to write 7 in the second blank.
- Read the question, 'How many ice cream cones are left?'
- Ask pupils to count the ice cream cones that are not crossed out. (8) Ask pupils to write 8 in the third and fourth blanks.
- Read together, '8 ice cream cones are left.'

Additional activities

Activity 3

- Give pupils Worksheet 49.
Ask them to cross out the correct number and write the subtraction sentence.

Introduction

In this unit, pupils learn to add by looking at number stories and writing number sentences. By the end of this unit pupils should be able to apply number stories to addition problems, write addition sums, add 10 to another number, and demonstrate understanding of the value of 0 in addition.



ADDITION WITH NUMBER STORIES AND NUMBER SENTENCES

UNIT 2

Pre-assessment activity

- Show flashcards of sets of objects and ask pupils to identify and count the objects shown on each card.
- Show 2 flashcards with different numbers of objects and ask, 'How many are there altogether?'
- Ask pupils to write the addition sentence on the board and say, 'There are ___ altogether.'
- Help pupils make up number stories for addition. E.g. give a pupil 3 lollipops and then 2 more; say 'Name has 3 lollipops. The teacher gives him 2 more. How many lollipops does he have now?' Help pupils write the addition sentence $3 + 2 = 5$ and say, 'Name has 5 lollipops altogether.'
- Repeat the activity by creating different scenarios.

2.1 Cricket



Suggested duration

40 minutes

Objectives

- Apply number stories to addition problems.

Required resources

- red and blue marbles
- Additional:
worksheet to count how many altogether.

Key terms

helmet

cricket bat

Applying number stories to addition problems

Activity 1

- Use marbles to create addition stories. For example, place 5 red marbles on the table and 3 red marbles on the chair.
- Elicit and write on the board, 'There are 5 marbles on the table.' and 'There are 3 marbles on the chair.'
- Ask, 'How many marbles are there altogether?'
Guide pupils to form the addition sentence $5 + 3 = 8$, and say, 'There are 8 marbles altogether.'
- Create other stories with different numbers of marbles.

Activity 2

- Ask pupils to describe the picture in Activity 2.1.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to count the helmets in the locker, (4) and write 4 in the first blank.
- Ask pupils to count the helmets on the bench (1), and write 1 in the second blank.
Read, 'How many helmets are there altogether?'
- Guide pupils to write the addition sentence $4 + 1 = 5$ helmets.
Repeat for the cricket bats ($5 + 4 = 9$)

Additional activities

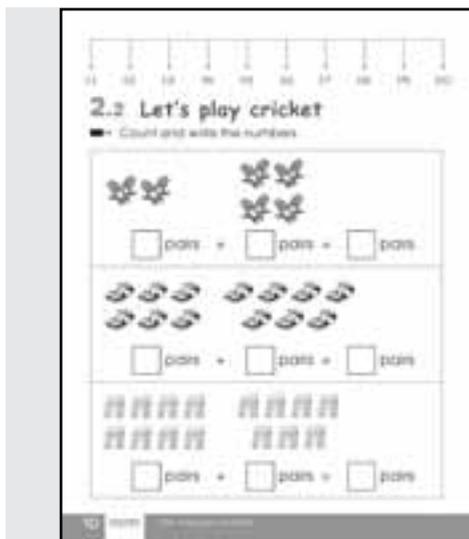
Activity 3

- Ask pupils to raise their hands if they know how to play cricket.
Ask them about their experiences of playing cricket.

Activity 4

- Give pupils a worksheet showing, e.g. a tennis court with a tennis net in the middle and some tennis balls. The following text can be written on the worksheet.
- There are _____ tennis balls on the left side of the net. There are _____ tennis balls on the right side of the net.
- How many tennis balls are there altogether?
- Ask pupils to count and fill in the blanks.

2.2 Let's play cricket



Suggested duration

40 minutes

Objectives

- Add pairs of items.

Required resources

- Additional:
worksheet to count the number of pairs

Key terms

pair

Adding pairs of items

Activity 1

- Ask a pupil to stand and elicit that s/he is wearing 1 pair of shoes.
Ask a second pupil to stand beside the first and elicit that the 2 students are wearing 2 pairs of shoes.
- Ask 3 pupils to stand on the left of the classroom and 4 pupils to stand on the right.
- Elicit that the pupils on the left have 3 pairs of shoes and those on the right have 4 pairs.
Ask 'How many pairs of shoes are there altogether?' Elicit that $3 + 4 = 7$; there are 7 pairs of shoes altogether.

Activity 2

- Ask pupils to look at Activity 2.2.
- Read the instruction, 'Count and write the numbers.'
- Ask pupils to look at the first question and count the pairs of gloves on the left. (2) Ask them to write 2 in the first box.
- Repeat for the gloves on the right, (4) and ask them to write 4 in the second box.
- Write on the board $2 + 4 = \underline{\quad}$. Elicit that the answer is 6 and ask pupils to write 6 in the third box.
- Ask pupils to complete the other 2 questions themselves.

Additional activities

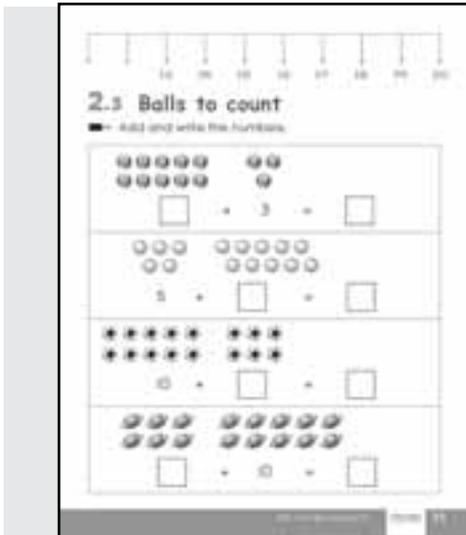
Activity 3

- Ask pupils to identify things that come in pairs, for example earrings, socks, shoes, etc.
- Ask, 'Can you wear 1 sock or 1 shoe?'

Activity 4

- Give pupils Worksheet 50.
- Ask them to count the pairs, add, and complete the addition sentences.

2.3 Balls to count



Suggested duration

40 minutes

Objectives

- Practise adding 10.

Required resources

- flashcards showing sets of 10 items
- flashcards of different sets of items
- Additional:
worksheet to group 10 items and add

Practise adding 10

Activity 1

- Show a flashcard of 10 items, e.g. 10 tennis balls, and a second flashcard of e.g. 3 tennis balls.
- Ask, 'What is the total number of tennis balls?' Pupils should count on from 10 (13) and say, 'There are 13 tennis balls.'
- Repeat with other pairs of flashcards, one showing 10 items and the other a different number. Emphasize that it is helpful to form a group of 10 and then count on.

Activity 2

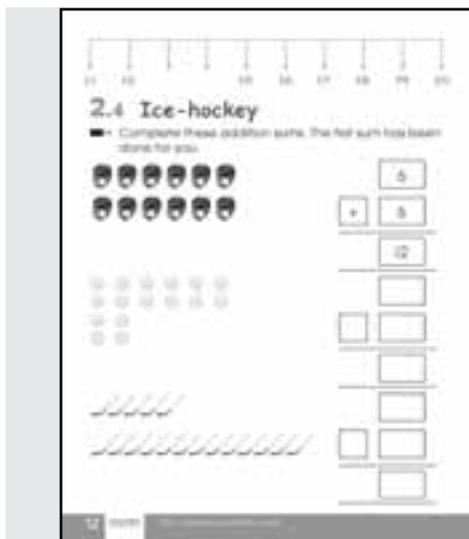
- Ask pupils to look at Activity 2.3.
- Read the instruction, 'Add and write the numbers.'
- Ask pupils to look at the first question, count the balls on the left, and write 10 in the first box.
- Ask 'What is 10 + 3?' They should count on and write 13 in the box on the right.
- Repeat for the second question. (15)
- Ask pupils to complete the other 2 questions themselves.

Additional activities

Activity 3

- Give pupils Worksheet 51.
Ask them to circle 10 items, write the addition sentence, and find the total number of objects.

2.4 Ice-hockey



Suggested duration

40 minutes

Objectives

- Complete addition sums.

Required resources

- flashcards of different sets of items
- Additional:
worksheet to practise vertical addition

Completing addition sums

Activity 1

- Show pairs of flashcards showing different numbers of identical items, e.g. 7 gloves and 5 gloves.
- Ask pupils to count how many gloves there are altogether.
- Guide them to count on from 7 to 12, and say, 'There are 12 gloves altogether.'
- Demonstrate how to write the addition sentence in vertical form.
- Say, 'There are 7 gloves.' and write 7 on the board. Say, 'Add on 5 gloves.' and write + 5 below 7.
- Tell pupils, 'There are 12 gloves altogether.' and write 12 between 2 lines.
- Repeat with different pairs of flashcards to get different totals.
Pupils should practise writing the addition sentences in vertical form.

Activity 2

- Ask pupils to look at Activity 2.4.
- Read the instruction, 'Complete these addition sums.' and the statement, 'The first sum has been done for you.'
- Ask pupils to look at the example and explain that they should count the objects in the first row and write the number in the box beside, count those in the second row and write the number in the box beside, and finally to count the total number and write it in the third box.
- Work through the second question with the pupils ($12 + 4 = 16$)
Ask pupils to complete the third question themselves.

Additional activities

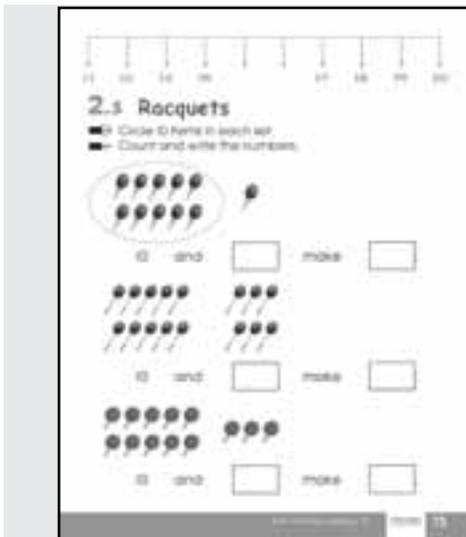
Activity 3

- Ask pupils to raise their hands if they know how to play ice-hockey. Ask them about their experiences of playing ice-hockey.

Activity 4

- Give pupils a worksheet showing different sets of items for pupils to count, add, and write vertical addition sums.

2.5 Racquets



Suggested duration

40 minutes

Objectives

- Practise adding 10.

Required resources

- pencils
- rubber bands
- Additional:
worksheet to group 10 things and add

Practise adding 10

Activity 1

- Place e.g. 15 pencils on the table and ask, 'How many pencils are there?'
- Pupils will find it hard to count the scattered pencils. Demonstrate that it is easier to count if 10 are grouped together first with a rubber band and then the others counted.
- Elicit that 5 pencils have not been grouped and that $10 + 5 = 15$. Ask pupils to say, 'There are 15 pencils.'
- Repeat the activity with different numbers of pencils.

Activity 2

- Ask pupils to look at Activity 2.5.
- Read the instruction, 'Circle 10 items in each set.'
- Ask pupils to count 10 items in each set and circle them.
- Read the instruction, 'Count and write the numbers.'

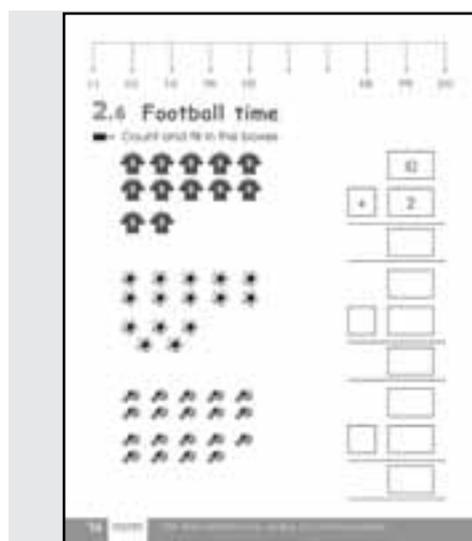
- Look at the first question and ask, 'How many racquets are not circled?' (1) Ask pupils to write 1 in the first box.
- Ask, 'What is $10 + 1$?' and ask pupils to write 11 in the box on the right.
- Ask pupils to repeat after you, '10 and 1 make 11.'
- Repeat for the second question, ($10 + 6 = 16$) and third question. ($10 + 3 = 13$).

Additional activities

Activity 3

- Give pupils Worksheet 52.
- Ask them to count and write the total number in the blank.

2.6 Football time



Suggested duration

40 minutes

Objectives

- Write addition sums.
- Add 10 to another number.

Required resources

- flashcards of sets of 10 items
- flashcards of different numbers of things
- Additional:
worksheet to practise vertical addition

Writing addition sums; adding 10 to another number

Activity 1

- Show a flashcard of 10 items, e.g. 10 footballs, and a flashcard of 5 footballs.
- Ask pupils to count on from 10 to find the total number, and say, 'There are 15 footballs.'
- Explain how to write the addition sentence in a vertical form.
- Repeat with other pairs of flashcards, one showing 10 items and the other a different number of the same items.

Activity 2

- Ask pupils to look at Activity 2.6.
- Read the instruction, 'Count and fill in the boxes.'
- Ask pupils to look at the first sum. Explain that the number 10 relates to the group of 10 jerseys and the 2 relates to the 2 extra jerseys.

- Elicit that $10 + 2 = 12$ and ask them to write 12 in the third box. Work through the second question with the students, counting the group of 10 first and then the 5 extra balls. Elicit that $10 + 5 = 15$ and ask pupils to write 15 in the third box.
- Ask pupils to complete the third question themselves.

Additional activities

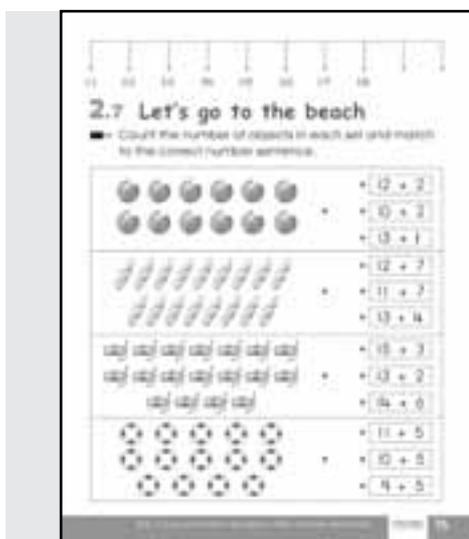
Activity 3

- Ask pupils to raise their hands if they like to watch football.
- Ask them about their favourite teams and favourite players.

Activity 4

- Give pupils a worksheet showing different sets of 10 items and second sets of fewer than 10 items.
- Ask pupils to find the totals by counting and to write vertical addition sums.

2.7 Let's go to the beach



Suggested duration

40 minutes

Objectives

- Count and match the sets to their number sentences.

Required resources

- flashcards of addition sentences
- flashcards of different sets of items

Counting and matching the sets to their number sentences

Activity 1

- Show flashcards of different sets of items and ask pupils to count the items, e.g. 14. Flash addition sentences one at a time and ask pupils to call 'Match' when they see a sum that has the same number as total, e.g. $6 + 8$ or $10 + 4$.
- Place the 2 matching cards together on the board.
- Repeat for different totals so that pupils begin to solve the addition sentences relatively quickly.

Activity 2

- Ask pupils to look at Activity 2.7.

- Read the instruction, 'Count the number of objects in each set and match to the correct number sentence.' Note – text should say count the objects, not count the number
- Count together the first set of beach balls. (12)
- Elicit that the addition sentence $10 + 2$ on the right gives the total 12.
Ask pupils to use a ruler and pencil to join the set of beach balls to the addition sentence $10 + 2$.
- Repeat for the surf boards. (17 and the addition sentence $13 + 4$)
Ask pupils to do the other 2 questions themselves.

Additional activities

Activity 3

- Ask pupils to form groups of 4 or 5.
Give each group of pupils a set of cards showing addition sentences and a second set showing sets of objects.
- Pupils should shuffle the cards and lay them face down on the floor.
- The aim of the game is to turn over 2 cards at a time so that the number of objects on one card matches the total of the addition sentence on the other.
- If the cards match, the pupil keeps the cards; if not, the cards are turned face down again.
- The pupil with the most cards at the end of the activity wins.

2.8 Where are my goggles?



Suggested duration

40 minutes

Objectives

- Demonstrate understanding of the value of 0 in addition.

Required resources

- sweets
- Additional:
worksheet to write addition sentences involving 0

Key terms

swimming goggles

Demonstrating understanding of the value of 0 in addition

Activity 1

- Place 10 sweets on the table. Ask 10 pupils to take turns to take 1 sweet each until no sweets remain.
- Ask, 'How many sweets are there on the table now?' Elicit that zero/0 is used to represent the number of sweets on the table.

Activity 2

- Ask pupils to describe the picture in Activity 2.8.
- Read the statement, 'Tariq is looking for his swimming goggles.'
- Explain that there are 3 pairs of swimming goggles on the beach and they must join the circles in sequence to find the pair that belongs to Tariq.
- Read the instruction, 'Add and write the answers.'
- Starting from $11 + 0$, ask pupils to add and write the answers.
- As they write the answers, elicit that 0 has no value so the sum is the same with or without the 0. Read the instruction, 'Join the numbers in the circles from the lowest to the greatest to find Tariq's goggles.'
- Elicit that 11 is the lowest number and ask pupils to trace the numbers from 11 to 20 with a finger before joining them with pencil.
Read the instruction, 'Colour Tariq's goggles.' Ask them to colour the correct pair.

Additional activities

Activity 3

- Give pupils Worksheet 53 and ask them to add and write the answers.

Introduction

In this unit, pupils are introduced to subtraction involving number stories and number sentences. By the end of the unit pupils should be able to relate number stories to subtraction and complete subtraction sentences and sums.



SUBTRACTION WITH NUMBER STORIES AND NUMBER SENTENCES



Pre-assessment activity

- Show flashcards and ask pupils to identify and count the objects shown.
- Show 2 flashcards and ask, 'How many more are there on flashcard 1 than flashcard 2?'
- Help pupils write the subtraction sentence on the board after answering, and say, 'There are ___ more.'
- Help pupils make up subtraction number stories, for example, give one pupil 10 lollipops and take away 2 of them. Elicit that s/he has 8 left. Tell the story, 'Name had 10 lollipops. The teacher took 2 of them; how many were left?' and help pupils write the subtraction sentence $10 - 2 = 8$.
- Repeat with different items and stories.

3.1 At the farm



Suggested duration

40 minutes

Objectives

- Understand subtraction number stories.

Required resources

- picture of a farm
- Additional:
drawing paper

Key terms

sheep

wool

Understanding number stories of subtraction

Activity 1

- Show a picture of a farm on the overhead projector and ask questions relating to it.
- For example, Show a farmer milking 10 cows; 7 cows have a bucket of milk beside them and 3 cows do not.
- Elicit the number story that there are 10 cows; 7 have been milked. 'How many cows have not been milked?' Help pupils to write the subtraction sentence $10 - 7 = 3$ and say, '3 cows have not been milked.'
- Ask pupils to make up other number stories related to the picture.

Activity 2

- Ask pupils to describe the picture in Activity 3.1.
- Read the instruction, 'Count and fill in the blanks.'
- Ask, 'How many sheep are there altogether?' (10). Ask pupils to write 10 in the first blank and say, 'There are 10 sheep altogether.'
- Elicit that 5 sheep have been sheared. Ask pupils to write 5 in the second blank and say 'The farmer has cut the wool off 5 sheep.'
- Read the question, 'How many sheep still have their wool?'
- Ask pupils to count the sheep that have wool. (5)
- Guide pupils to write the subtraction sentence $10 - 5 = 5$.
- Ask them to write 5 in the last blank and read together, '5 sheep still have their wool.'

Additional activities

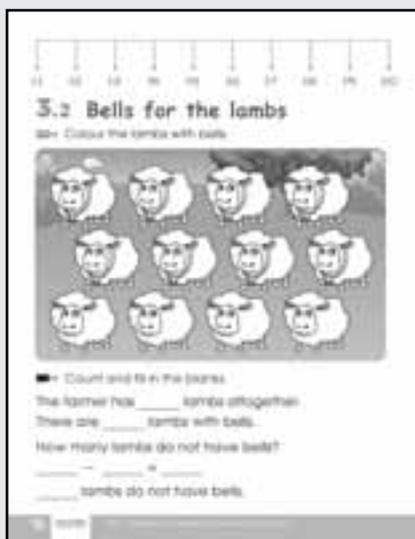
Activity 3

- Ask pupils to raise their hands if they have been to a farm.
- Encourage them to form subtraction stories the next time they visit a farm.

Activity 4

- Give each student a sheet of drawing paper and ask them to draw a farm and form subtraction sentences from their drawings.
- For example, pupils can draw 10 chickens with eggs and 5 without. The subtraction story would be, 'There are 15 chickens. 10 chickens have laid eggs. How many chickens have not laid eggs?' The subtraction sentence would be $15 - 10 = 5$.
- Ask pupils to share their drawings and subtraction stories.

3.2 Bells for the lambs



Suggested duration

40 minutes

Objectives

Understand subtraction number stories.

Required resources

- felt board and felt animals
- Additional:
worksheet to colour the correct number and write the subtraction sentence

Key terms

lamb

bell

Understanding number stories of subtraction

Activity 1

- Use the felt board and animals to create subtraction stories. For example, put 11 felt ducks on the felt board: 6 in the pond and 5 in the field.
- Encourage 1 pupil to say, 'There are 11 ducks.' A second pupil should continue, '6 ducks are on the pond.' A third pupil should ask, 'How many ducks are not on the pond?'
- The fourth pupil should say, ' $11 - 6 = 5$. 5 ducks are not on the pond.'

Activity 2

- Ask pupils to look at Activity 3.2.
- Read the instruction, 'Colour the lambs with bells.' Ask pupils to do this.
- Read the instruction, 'Count and fill in the blanks.'
- Ask, 'How many lambs are there altogether?' (12) Ask pupils to write 12 in the first blank and say, 'The farmer has 12 lambs altogether.'
- Elicit that they coloured 8 lambs; ask them to write 8 in the second blank and to say, 'There are 8 lambs with bells.'
- Read the question, 'How many lambs do not have bells?'
- Ask pupils to count the lambs that do not have bells. (4)
- Guide pupils to write the subtraction sentence $12 - 8 = 4$. Ask pupils to write 4 in the last blank and read together, '4 lambs do not have bells.'

Additional activities

Activity 3

- Give pupils Worksheet 54.
- Ask them to colour and write the subtraction sentence for the number of blue objects.

3.3 Sacks of wool



Suggested duration

40 minutes

Objectives

- Complete subtraction number sentences.

Required resources

- flashcards of farm animals
- Additional:
worksheet to cross out and write the numbers

Completing number sentences of subtraction

Activity 1

- Line up flashcards of farm animals on the board; ensure that there is only 1 animal on each flashcard and all the animals are identical. For example, 15 flashcards, each of 1 horse.
- Tell pupils, 'There are 15 horses on a farm.' Ask them to count the horses.
- Tell pupils, '8 horses galloped away.' Remove 8 cards.
- Ask, 'How many horses are left on the farm?' Pupils should count 7.
- Write on the board the subtraction sentence $15 - 8 = 7$.
- Repeat the activity using different animals and different numbers of animals.

Activity 2

- Ask pupils to look at Activity 3.3.
- Read the instruction, 'Count and write the numbers.'
- Work through the first question. Ask 'How many sacks of wool are there?' (8)
- Ask, 'How many sacks of wool are crossed out?' (4) Ask pupils to write 4 in the first box.
- Ask, 'How many bags of wool are left?' (4) Ask pupils to write 4 in the second box.
- Complete the remaining questions in the same way.

Additional activities

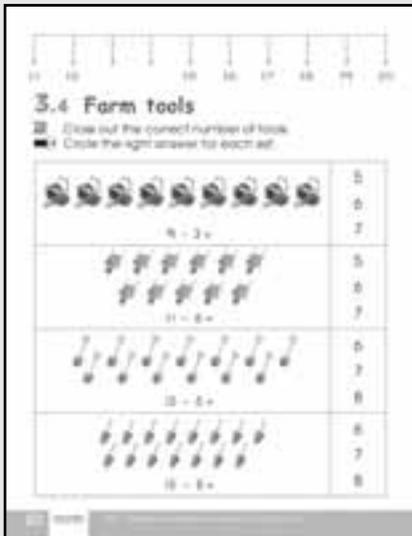
Activity 3

- Ask pupils if they have seen the bags of wool after farmers have sheared the sheep. Do they have items made of wool at home? Ask them to bring them to show to the class.

Activity 4

- Give pupils Worksheet 55
Ask them to cross out, write the numbers, and/or complete the subtraction sentences.

3.4 Farm tools



Suggested duration

40 minutes

Objectives

- Complete subtraction number sentences.

Required resources

- flashcards of farm animals
- Additional:
worksheet to cross out the correct number and write the answer

Key terms

tool

Completing number sentences of subtraction

Activity 1

- Line up a set of flashcards of animals, e.g. 12 cards each showing 1 lamb.
- Write a subtraction sentence on the board, e.g. $12 - 3 =$
- Ask a pupil to remove cards to illustrate the subtraction sentence and say, $12 - 3 = 9$.
- Repeat the activity using different animals and different numbers.

Activity 2

- Ask pupils to look at Activity 3.4.
- Read the instruction, 'Cross out the correct number of tools.'
- Work through the first question together: read the subtraction sentence $9 - 3 =$ and ask pupils to cross out 3 watering cans. Ask how many are left. (6)
- Read the instruction, 'Circle the right answer for each set.' Ask pupils to circle 6.
- Help pupils to complete the remaining questions in the same way.

Additional activities

Activity 3

- Ask pupils if they have used farm tools.

Ask them about the farm tools they have used and how easy or difficult it is to use them.

Activity 4

- Give pupils Worksheet 56
Ask them to look at the subtraction sentence, cross out the correct number of objects, and write the correct answer.

3.5 Winter is Here!



Suggested Duration

40 minutes

Objectives

- Complete subtraction number sentences.

Required resources

- flashcards of farm animals
- Additional:
worksheet to cross out the correct number and write how many left

Completing number sentences of subtraction

Activity 1

- Line up flashcards of farm animals as in previous unit, e.g. 18 sheep.
Tell the pupils that some sheep ran away and there are only 10 left; ask a pupil to remove cards for the sheep that ran away. S/he should remove them one at a time and count backwards as s/he does. How many cards has s/he removed? (8)
- Write on the board the subtraction sentence $18 - 8 = 10$.
- Repeat the activity using different animals and different numbers.

Activity 2

- Ask pupils to look at Activity 3.5.
- Read the instruction, 'Cross out the correct number of items.'
- Read the instruction, 'Write the correct numbers in the boxes. The first one has been done for you.'

- Explain how the first question has been done: first count the items and write the total in the first box; next cross out items until 6 are left. Pupils should see that they must cross out 4 items, and write 4 in the second box.
- Work through the second question together. Ask pupils to count the total number of scarves and write 14 in the first box.
- Ask pupils, 'How many scarves must be left?' (7)
- Pupils should cross out scarves and count backwards until 7 are left. Elicit that they have crossed out 7 scarves and ask them to write 7 in the second box.
- Guide pupils to complete the third and fourth questions in the same way.

Additional activities

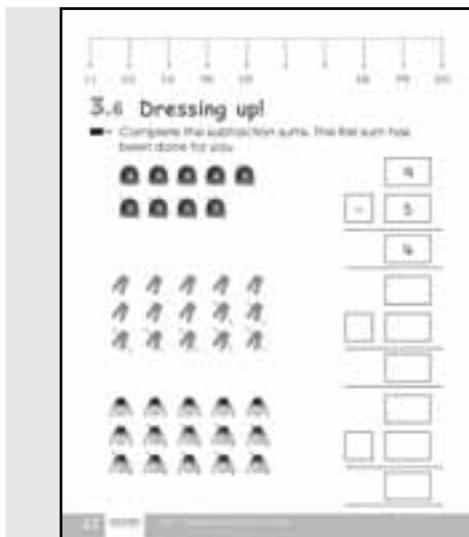
Activity 3

- Ask pupils if they have been on a winter holiday.
- Ask them to share their experiences and say how many items of winter clothing they packed.

Activity 4

- Give pupils a worksheet showing a shop selling winter clothing, for example 10 mittens, 18 hats, 15 jackets and 12 scarves.
- Tell pupils that Neha's parents bought 4 mittens, 6 hats, 3 jackets and 2 scarves.
- Ask them to cross out the items that have been bought and write how many of each remain.

3.6 Dressing up!



Suggested duration

40 minutes

Objectives

- Complete subtraction sums.

Required resources

- flashcards of sets of objects
- Additional:
subtraction sums worksheet

Completing subtraction sums

Activity 1

- Show a flashcard of e.g. 17 gloves. Cross out 5 gloves and ask how many are left. Guide pupils to count backwards from 17 to find how many are left. (12) Demonstrate how to write the subtraction sentence in a vertical form:
- Say 'There are 17 gloves.' and write 17 on the board.
- Say, '5 gloves were lost.' and write $- 5$ below 17.
- Say, 'There are 12 gloves left.' and write the 12 in the lines.
- Repeat with other flashcards and numbers.

Activity 2

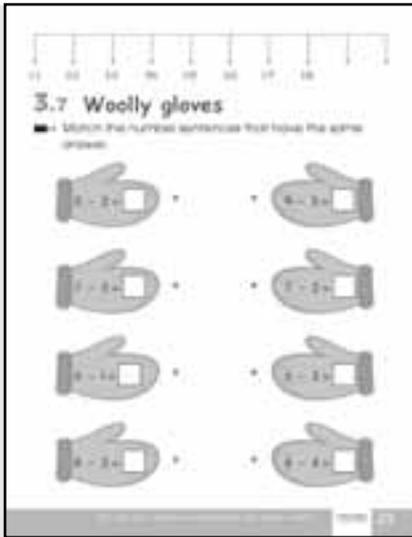
- Ask pupils to look at Activity 3.6.
- Read the instruction, 'Complete the subtraction sums.'
- Read the statement, 'The first sum has been done for you.'
- Explain how the example has been done: count the total number of items and write the number in the top box; count how many items have been crossed out and write the number in the lower box; count how many remain and write the number in the box between the lines.
- Work through the second question together. Ask pupils to count the total number of pairs of trousers and write 15 in the top box. Ask them how many have been crossed out and write -7 in the lower boxes.
Elicit that $15 - 7 = 8$ and ask pupils to write 8 in the space between the lines.
- Ask pupils to complete the third question themselves.

Additional activities

Activity 3

- Give pupils a worksheet showing sets of items, some of which are crossed out. Ask them to count and write the subtraction sums vertically.

3.7 Woolly gloves



Suggested duration

40 minutes

Objectives

- Identify number sentences with the same answer.

Required resources

- flashcards of different number sentences
- Additional:
worksheet to write subtraction number sentences with the same answer

Identifying number sentences with the same answer

Activity 1

- Show pairs of flashcards showing number sentences with the same answers, e.g. $7 - 1 = \underline{\quad}$, and $8 - 2 = \underline{\quad}$.
- Elicit that the answer to both sums is the same, 6. Place the pair of cards together on the board. Repeat with other pairs of cards.
- Repeat the activity with other pairs of flashcards.

Activity 2

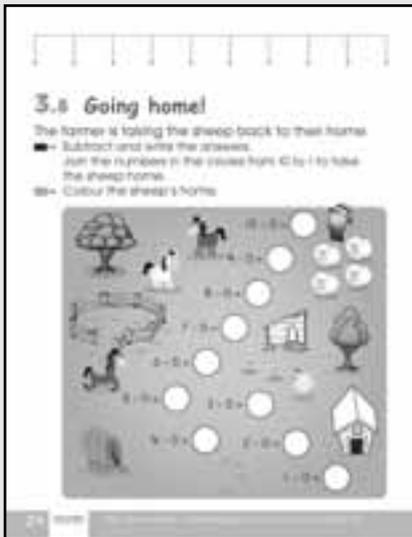
- Ask pupils to look at Activity 3.7.
- Read the instruction, 'Match the number sentences that have the same answers.'
- Point to the first blue glove. Ask, 'What is $5 - 2$?' (3)
- Ask pupils to find the green glove that has the same answer. ($6 - 3$)
- Ask pupils to use a ruler and pencil to match the 2 gloves. Work through the second question together. ($7 - 3 = 4$; $8 - 4 = 4$)
- Ask pupils to match the other 2 pairs themselves.

Additional activities

Activity 3

- Give pupils Worksheet 57. Ask them to write another number sentence that would give the same answer for each.

3.8 Going home!



Suggested duration

40 minutes

Objectives

- Demonstrate understanding of the value of 0 in subtraction.

Required resources

- chocolates
- flashcard of 0
- Additional:
worksheet to write subtraction sentences involving 0

Key terms

farmer
sheep

Demonstrating understanding of the value of 0 in subtraction

Activity 1

- Place 15 chocolates on the table. Ask pupils to take one each until all the chocolates have gone and the table is empty.
- Ask, 'How many chocolates are there on the table now?' Elicit that zero/0 represents the number of chocolates left on the table.
Show the flashcard of 0. Tell pupils, 'There are 0 chocolates now.'

Activity 2

- Ask pupils to describe the picture in Activity 3.8.
- Read the sentence, 'The farmer is taking the sheep back to their home.'
- Read the instruction, 'Subtract and write the answers.'
- Starting from the farmer, ask pupils to subtract and write the answers.
- Point out that 0 has no value so the answer with or without the subtraction of 0 is the same.
- Read the instruction, 'Join the numbers in the circles from 10 to 1 to take the sheep home.'
- Guide pupils to trace the numbers in the circles from 10 to 1, and then join them with pencil.
- Read the instruction, 'Colour the sheep's home.' Ask pupils to do this.

Additional activities

Activity 3

- Give pupils a worksheet with subtraction sentences involving 0. For example it could show a crate of 10 eggs, none of which is broken, so pupils write $10 - 0 = 10$, or a box of 20 oranges, none of which is rotten so pupils write $20 - 0 = 20$. Ask pupils to subtract and write how many are left.

Introduction

In this unit, pupils learn to tell the time. By the end of the unit, pupils should be able to tell the time using the hour hand, match digital and analogue times, associate time with daily activities and sequence the days of the week and months of the year.



Pre-assessment activity

- Organise a race between 10 pupils and ask the other pupils to use the ordinals 1st to 10th to describe the order in which they finish. Show flashcards 1st to 10th as they do this.
- To introduce the measurement of time, explain that the first pupil took the shortest time and the 10th pupil took the longest time.
- Show flashcards of and talk about activities that take a long time and activities that take a short time. Discuss why some activities take longer than others.
- Discuss what pupils do during the day and at night.
- Show flashcards of these activities and discuss when they are carried out. Encourage pupils to use the terms daytime and night time as they talk.
- Ask 'How do we tell time?' If necessary, explain that we use a clock or watch

4.1 A clock



Suggested duration

40 minutes

Objectives

- Identify the hour hand of a clock.

Required resources

- analogue clock
- Additional:
cardboard clock template
fasteners

Key terms

time
hand
hour hand
o'clock

Identifying the hour hand of a clock

Activity 1

- Show pupils an analogue clock and identify the hands. Elicit that there are 2 hands.
- Explain that the shorter hand is the hour hand and ask pupils to repeat 'hour hand' 3 times. Explain that the hour hand helps you to tell the time by the hour.
- Move the hands to show 1 o'clock. Ask the pupils to say which number the shorter hand is pointing to. Tell pupils that the clock shows 1 o'clock.
- Repeat for 2 o'clock and other hours.

Activity 2

- Ask pupils to look at Activity 4.1.
- Read the statement, 'Zareen and Zain are learning to tell the time.'
- Point to the speech bubble beside Zareen and read together, 'Clocks tell us the time.'
- Point to the speech bubble beside Zain and read together 'Clocks have 2 hands that show the time.'
- Ask pupils to point to the 2 hands.
- Read the instruction, 'Fill in the blanks.'
- Ask, 'How many hands does a clock have?' Ask pupils to write 2 in the first blank.
- Read the statement, 'The small hand is called the hour hand.' Ask pupils to point to the small hand and say 'hour hand'.
- Read the instruction, 'Look at the hour hand and tell the time.'
- Ask, 'What number is the hour hand pointing to?' Pupils should say 3.
- Tell pupils 'It is 3 o'clock.' Ask them to write 3 in the last blank.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have clocks at home.
- Encourage pupils to look at both hands of the clock and observe how they move.

Activity 4

- Give pupils a cardboard clock template, minute and hour hands, and fasteners to make a clock
- Ask pupils to decorate the clock face in any way they wish.
- Demonstrate how to fasten the minute and hour hands on the clock using fasteners.
- Allow pupils to share their decorated clocks with the class.

4.2 Grandfather's clock



Suggested duration

1 hour

Objectives

- Tell the time using the hour hand.

Required resources

- flashcards of numbers 1 to 12
- Additional:
worksheet to write the numbers on a clock

Key terms

clock
o'clock

Telling the time using the hour hand

Activity 1

- Ask 12 pupils to come to the front of the class and give each of them a flashcard of numbers 1 to 12.
- Ask them to stand in a circle in numerical order when you say 'Go'.
- When the circle is complete, ask the pupils to call out their numbers in order.
- Repeat so that all pupils can take part in the activity.

Activity 2

- Ask pupils to describe the picture in Activity 4.2.
- Read the instruction, 'Fill in the missing numbers on the clock.'
- Guide pupils to write 1 between 12 and 2.
- Elicit that 3 comes after 2 and ask pupils to write 3 in the correct place.
- Continue to help the pupils complete the clock face.
- Read grandfather's question, 'What is the time?' and the instruction, 'Fill in the blanks.'
- Elicit that the hour hand is pointing to 7 and ask them to write 7 in the blank.
- Read together, 'It is 7 o'clock.'

Additional activities

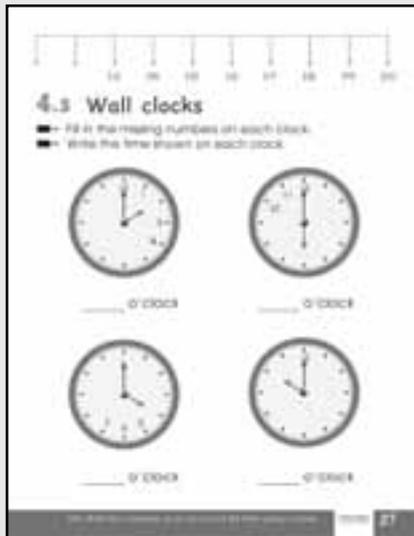
Activity 3

- Ask pupils to raise their hands if they have a grandfather clock at home.
- Ask pupils to describe their grandfather clock. What is the history of the clock?

Activity 4

- Give pupils Worksheet 58.
- Ask them to write the missing numbers on the clock faces.

4.3 Wall clocks



Suggested duration

40 minutes

Objectives

- Write the numbers on a clock face.
- Tell time using o'clock.

Required resources

- analogue clock
- Additional:
worksheet to circle the correct time

Key terms

clock

time

Writing the numbers on a clock and telling time using o'clock

Activity 1

- Show pupils an analogue clock.
- Set the time to 3 o'clock, and elicit that the hour hand is pointing to 3.
- Ask pupils to repeat after you, 'It is 3 o'clock.'
- Repeat for different o'clock times.

Activity 2

- Ask pupils to look at Activity 4.3.
- Read the instruction, 'Fill in the missing numbers on each clock.'
- Recite together the number sequence from 1 to 12 as pupils write the missing numbers.
- Read the instruction, 'Write the time shown on each clock.'
- Point to the first clock, elicit that the hour hand is pointing to 2. Ask pupils to write 2 in the blank.
- Ask pupils to repeat after you '2 o'clock.'
- Complete the other questions in the same way.

Additional activities

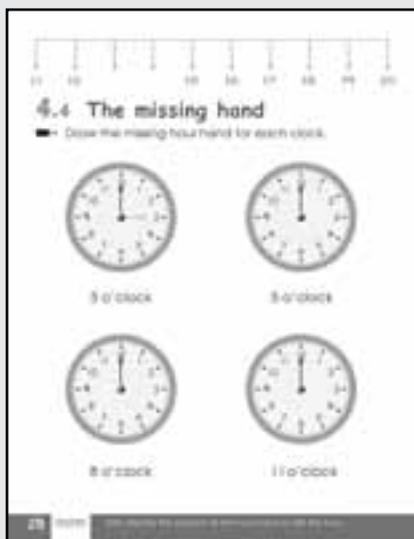
Activity 3

- Ask pupils if they have wall clocks at home.
- How many wall clocks do pupils have at home?
- Ask pupils to describe the location of each wall clock..

Activity 4

- Give pupils Worksheet 59.
- Ask them to to circle the correct clock.

4.4 The missing hand



Suggested duration

40 minutes

Objectives

- Identify the position of the hour hand to tell the hour.

Required resources

- felt clock, felt hour hand
- Additional:
analogue clocks pupils made in unit 4.1

Key terms

hour hand
clock

Identifying the position of the hour hand to tell the hour

Activity 1

- Place a large felt clock with no hour hand at the front of the class
- Ask pupils to form groups of 4 or 5 and give each group a felt hour hand.
- Tell pupils that you will say a time, and when you say 'Go', they should race to the board and fix the hour hand in the correct position. The first pupil to fix the hand correctly scores a point for his/her team.
- The team with most points at the end of the activity wins.

Activity 2

- Ask pupils to look at Activity 4.4.
- Read the instruction, 'Draw the missing hour hand for each clock.'

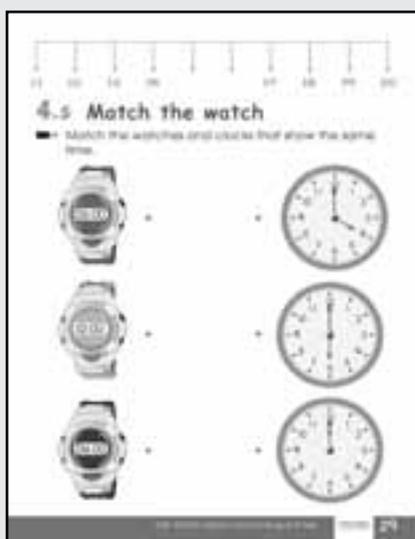
- Ask pupils to read the time below the first clock. (3 o'clock)
- Ask them to trace the dotted hour hand.
- Ask pupils to read the time below the second clock and elicit that the hour hand should point to 5.
- Ask pupils to draw an hour hand pointing to the number 5 on that clock.
- Emphasize that the hour hand must be shorter than the other hand on the clock.
- Ask pupils to draw the hour hands on the other 2 clocks themselves.

Additional activities

Activity 3

- Ask pupils to work in pairs and take out the clocks they made in Unit 4.1.
- Ask them to move the longer hand of their clock to 12.
- Pupils take turns to move the hour hand of their clock and ask their partners to tell the time.
- Emphasize that the hour hand must point exactly at a number.
- Move around the class to check progress.

4.5 Match the watch



Suggested duration

40 minutes

Objectives

- Match digital and analogue times.

Required resources

- analogue clocks
- digital clocks
- Additional:
worksheet to draw the correct time

Key terms

watch

clock

Matching digital and analogue times

Activity 1

- Show pupils an analogue clock and elicit that it shows e.g. 6 o'clock.
- Show pupils the same time on a digital clock and explain that 06:00 is read as 6 o'clock.
- Repeat the activity for other o'clock times so that pupils can see that digital and analogue clocks tell the same time but display them differently.

Activity 2

- Ask pupils to look at Activity 4.5.
- Read the instruction, 'Match the watches and clocks that show the same time.'
- Ask pupils to read the time on the first watch (6 o'clock).
- Ask them to find the analogue clock that reads 6 o'clock and use a ruler and pencil to match them.
- Repeat for the second watch. (12 o'clock) Explain that for this time the hands of the clock overlap.
- Pupils should match the last watch to the corresponding clock.

Additional activities

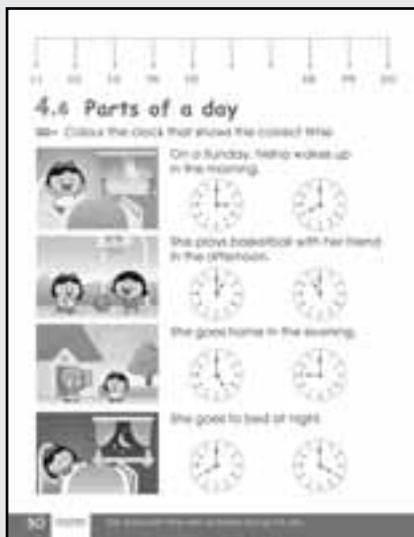
Activity 3

- Ask pupils to raise their hands if they have digital watches or clocks.
- Which one do pupils like to use? Ask them to explain why.

Activity 4

- Give pupils Worksheet 60.
- Ask them to draw the correct time on the analogue clock.

4.6 Parts of a day



Suggested duration

1 hour

Objectives

- Associate time with activities during the day.

Required resources

- flashcards showing activities for different times of the day
- flashcards of morning, afternoon, evening, night
- Additional:
worksheet to draw activities in the morning, afternoon, evening and at night

Key terms

morning

afternoon

evening

night

Associating time with activities during the day

Activity 1

- Show a flashcard of an activity that takes place in the morning, for example, eating breakfast.
- Ask, 'At what time of the day do you eat breakfast?'
- When pupils say morning, show a flashcard of the word and ask pupils to say it 3 times.
- Repeat for afternoon, evening and nighttime activities, e.g. eating lunch, watching TV and sleeping.

Activity 2

- Ask pupils to look at Activity 4.6.
- Explain that it shows a sequence of events that happen throughout the day.
- Read the instruction, 'Colour the clock that shows the correct time.'
- Read the first sentence, 'On a Sunday, Neha wakes up in the morning.'
- Ask pupils the time shown on the first clock (3 o'clock). Elicit that they do not wake up at this time.
- Point to the second clock and establish that it shows 8 o'clock.
- Elicit that pupils wake up at this time on Sunday and ask them to colour this clock
- Repeat for the other activities and clocks.

Additional activities

Activity 3

- Give pupils a worksheet divided into 4 sections with headings morning, afternoon, evening, and night. Each section should also have a clock face with missing hour hands.
- Ask pupils to draw activities for each time of day and show on the clock the time that they do each activity.
- Ask pupils to share their drawings and the activities they do at each time of the day.

4.7 Days of the week



Suggested duration

40 minutes

Objectives

- Know the correct sequence of the days of the week.

Required resources

- flashcards of days of the week

Key terms

day

week

Knowing the correct sequence of the days of the week

Activity 1

- Ask, 'What day is it today?' Pupils reply e.g. Wednesday. Place the flashcard for Wednesday on the board.
- Ask, 'What day was yesterday?' Pupils reply Tuesday. Place the flashcard for Tuesday on the board in front of Wednesday.
- Repeat for 'the day before yesterday.' (Monday)
- Repeat for the other days of the week until all the flashcards are laid out in sequence on the board from Monday to Sunday.
- Recite together the names of the days of the week from Monday to Sunday, pointing at the flashcards as you say the names.

Activity 2

- Ask pupils to look at Activity 4.7.
- Read the instruction, 'Colour the first day of the week red.'
- Ask pupils to point to Monday and to colour it red.
- Read the instruction, 'Colour the seventh day of the week, blue.'
- Elicit that Sunday is the seventh day and ask pupils to colour it blue.
- Read the instruction, 'Fill in the blanks.'
- Count together the days of the week. (7)
- Ask pupils to write 7 in the first blank and read together, 'There are 7 days in one week.'
- Ask, 'What day comes between Tuesday and Thursday?' Ask pupils to point to Tuesday and then to Thursday in the book and elicit that Wednesday is the day between them.
- Ask pupils to write Wednesday in the second blank.

Additional activities

Activity 3

- Ask pupils to name their favourite day of the week.
- Ask them to explain why they like particular days of the week.
- Which day of the week do all the pupils like the most and why?

Activity 4

- Ask pupils to form groups of 7 and give each group a set of flashcards – Monday to Sunday.
- Ask pupils to shuffle the cards and randomly hand one to each member of the group.
- When you say 'Go!', pupils should look at their cards and line up in order from Monday to Sunday.
- The first group to stand in correct order wins.

4.8 12 Months of the year

The worksheet is titled '4.8 12 months of the year' and features a small illustration of a birthday cake. It contains the following text and instructions:

Sabar's birthday is in the month between April and June.

- Circle the month of Sabar's birthday.
- Circle the month after Sabar's birthday.
- Write the number of days in each month.
- Which month has the fewest days?

Below the text is a grid of boxes for writing the names of the months. At the bottom, there are three questions:

- Fill in the blanks.
- Queen's birthday is in the 4th month of the year.
- Queen's birthday is in the month of _____.
- My birthday is in the month of _____.

Suggested duration

1 hour

Objectives

- Know the correct sequence of the months of the year.

Required resources

- calendar
- Additional:
worksheet to make own calendar

Key terms

month

year

Knowing the correct sequence of the months of the year

Activity 1

- Show pupils a large calendar.
- Point to the first month, elicit that it is January and ask pupils to say the name 3 times.
- Repeat for each of the months of the year.
- Recite together the names of the months in sequence from January to December.

Activity 2

- Ask pupils to look at Activity 4.8.

- Read the sentence, 'Babar's birthday is in the month between April and June.'
- Read the instruction, 'Colour the month of Babar's birthday green.'
- Ask pupils to point to April and then to June, and identify the month in between.
- Elicit that it is May and ask pupils to colour May green.
- Read the instruction, 'Circle the month after Babar's birthday.'
- Guide pupils to circle June.
- Read the instruction, 'Write the number of days in each month.'
- Tell pupils to refer to the calendar and guide them to write the number of days in each month.
- Read the question, 'Which month has the fewest days?'
- Ask pupils to look at their work and elicit that February has the fewest days.
- Read the instruction, 'Fill in the blanks.'
- Read the statement, 'Zareen's birthday is in the 9th month of the year.'
- Guide pupils to write September in the first blank, and their birthday month in the second blank.

Additional activities

Activity 3

- Ask pupils to name the month of their birthday.
- How many pupils have birthdays in the same months?

Activity 4

- Give pupils Worksheet 61 and help them to make a calendar by filling in the name of any month with its name, days, and dates.
- Pupils can complete one worksheet for each month of the year.

Introduction

In this unit, pupils learn to measure and compare mass. By the end of this unit, pupils should be able to identify heavy and light objects in terms of mass, compare the mass of objects, and compare mass using non-standard units of measurement.



Pre-assessment activity

- Place some heavy and light objects around the classroom and ask pupils to feel their weight and carry them to determine how heavy they are.
- Pass a feather around the class and elicit that it is light. Ask pupils to repeat after you, 'The feather is light.'
- Ask pupils to use the terms 'heavy' and 'light' as they try to move objects of different weights.
- Show pupils a sealed empty box and ask them to guess if it is heavy or light. Ask one pupil who guesses heavy and one pupil who guesses light to lift the box to determine who is correct.
- Walk around the school premises and identify objects in terms of heavy or light.
- Ask pupils to pick up a light object; they may pick up leaves or flowers. Ask pupils to pick up a heavy object; they may pick up a stone.
- Elicit that a tree is too heavy to pick up.

5.1 At the Music Shop



Suggested duration

40 minutes

Objectives

- Identify heavy and light objects.

Required resources

- objects of different weights
- Additional:
drawing paper

Key terms

musical instrument

heavy

light

Identifying heavy and light objects

Activity 1

- Show pupils objects of different weights, e.g. a feather and rock.
- Pass them round so that pupils can feel their weights. Hold up the feather and tell pupils 'light'.
- Elicit that the feather is light. Write light on the board and ask pupils to say it 3 times.
- Ask pupils to name other objects which are light.
- Repeat for the rock and heavy.
- Ask pupils to identify classroom objects that are heavy or light.

Activity 2

- Ask pupils to describe the picture in Activity 5.1.
- Read the instruction, 'Colour the musical instruments.' Ask pupils to do this.
- Read the words 'This is heavy.' and 'These are light.'
- Ask pupils to point to the other musical instruments and say, 'This is heavy.' or 'This is light.'

Additional activities

Activity 3

- Ask pupils if they have played any of the musical instruments shown in the picture.
- Ask pupils which musical instruments they like to play.

Activity 4

- Ask pupils to form groups of 4 or 5 and give each group a sheet of drawing paper.
- Ask the pupils to divide the paper into 2 halves headed Heavy and Light.
- Ask them to draw objects that they think are heavy and light in the respective columns.
- Ask pupils to share their drawings with the class. Are there some objects that the other groups think have been drawn in the wrong columns?

5.2 Musical instruments



Suggested duration

40 minutes

Objectives

- Discuss the concept of mass in terms of heavy and light.

Required resources

- flashcards of musical instruments
- some light musical instruments
- Additional:
worksheet to identify heavy and light animals

Key terms

instrument

light

heavy

Discuss the concept of mass in terms of heavy and light

Activity 1

- Bring some light musical instruments to class e.g. recorders, triangles, maracas and other percussion instruments, and let the students handle them.
- Elicit that they are easy to handle because they are light.
- Show flashcards of different musical instruments and ask whether each is heavy or light.
- If possible, take pupils to the music room to look at and identify musical instruments that are light or heavy.
- Ask pupils to try to move a piano or a harp and to repeat after you, 'These are heavy.'

Activity 2

- Ask pupils to look at Activity 5.2.
- Read the instruction, 'Circle the instruments that are light.'
- Ask pupils to point to the instruments that are light and then circle them.
- Read the instruction, 'Colour the instruments that are heavy.'
- Ask pupils to point to the heavy instruments and then colour them.

Additional activities

Activity 3

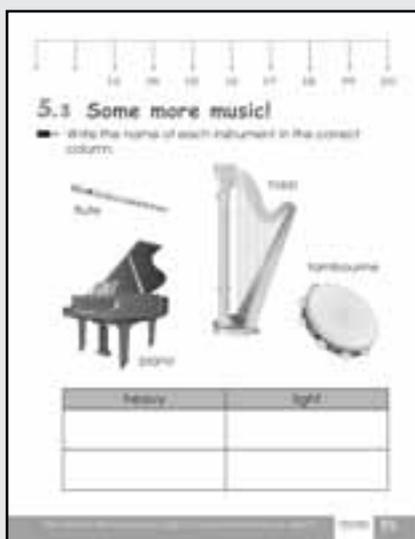
- Ask pupils to name one heavy instrument that they would like to play. Compare their answers; is it the same instrument?

- Ask pupils to name one light instrument that they would like to play. Compare their answers; is it the same instrument?

Activity 4

- Give pupils Worksheet 62. Ask them to circle the heavy animals and cross out the light animals.

5.3 Some more music!



Suggested duration

40 minutes

Objectives

- Use the terms heavy and light to compare the mass of objects.

Required resources

- flashcards of musical instruments
- Additional:
worksheet to classify objects
stickers/pictures of heavy and light objects

Key terms

instrument

Using the terms heavy and light to compare the mass of objects

Activity 1

- Give each pupil a flashcard of a musical instrument.
- Ask them to decide whether their instrument is heavy or light. Those with light instruments should form a group on the left, and those with heavy instruments should form a group on the right.
- Ask pupils to form their groups.
- Ask each pupil in the light group to hold up his/her card and say, 'This is light.' The other pupils decide if that pupil is standing in the correct group.
- Do the same for the pupils in the heavy instruments group.

Activity 2

- Ask pupils to look at Activity 5.3.
- Read the instruction, 'Write the name of each instrument in the correct column.'
- Point to the flute, elicit that it is light and ask pupils to write 'flute' in the light column.
- Point to the piano, elicit that it is heavy and ask pupils to write 'piano' in the heavy column.
- Guide pupils to write harp in the heavy column and tambourine in the light column.

Additional activities

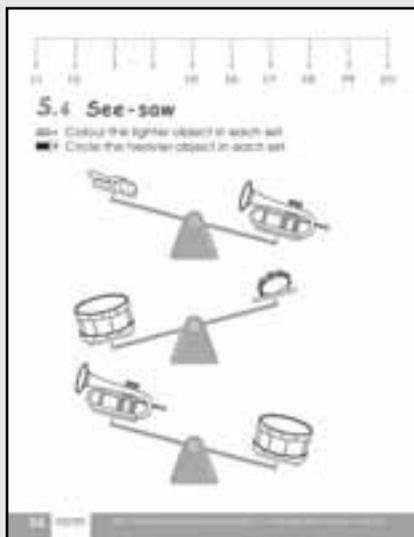
Activity 3

- Ask pupils what musical instruments they can play.
- Give them percussion instruments to play while other pupils dance.
- If pupils can play instruments, ask them to play for the class.

Activity 4

- Give pupils a worksheet with two columns headed Heavy and Light and stickers/pictures of various items.
- Ask them to decide if the items shown are heavy or light and stick them under the correct headings.

5.4 See-saw



Suggested duration

40 minutes

Objectives

- Use the terms heavy and light to compare the mass of objects.

Required resources

- musical instruments of different weight
- Additional:
worksheet to identify the heavier and lighter objects

Key terms

heavier

lighter

Using the terms heavy and light to compare the mass of objects

Activity 1

- Show pupils instruments of different weights, e.g. a trumpet and a tambourine.
- Ask one pupil to hold the objects and bend his body down on the side holding the heavier instrument. (trumpet)
- Hold up the tambourine and say, 'lighter.' Write the word on the board and ask the pupils to say it 3 times.
- Repeat with the trumpet and the word heavier.
- Repeat the comparison activity with different pairs of musical instruments

Activity 2

- Ask pupils to look at Activity 5.4.
- Read the instructions, 'Colour the lighter object in each set.' and 'Circle the heavier object in each set.'
- Ask pupils to look at the first pair of instruments and elicit that the maracas are lighter than the trumpet. Ask them to colour them. (If necessary remind them that the balance will tilt down on the side of the heavier object.)
- Elicit that the trumpet is heavier and ask them to circle it.
- Repeat with the second pair of instruments, (lighter – tambourine; heavier – drum) and the third pair. (lighter – trumpet; heavier – drum)

Additional activities

Activity 3

- Give pupils Worksheet 63. Ask them to circle the heavier animal and cross out the lighter animal of each pair.

5.5 Heavier or lighter



Suggested duration

40 minutes

Objectives

- Compare the mass of objects.

Required resources

- flashcards of different musical instruments
- Additional:
worksheet to draw heavier or lighter

Key terms

harmonium	flute
accordion	triangle
harmonica	violin

Comparing the mass of objects

Activity 1

- Give one pupil 2 flashcards showing different musical instruments.
- Ask the pupil to tilt his hand and body downwards to the side with the heavier musical instrument.
- Repeat the activity with different pupils and pairs of flashcards.

Activity 2

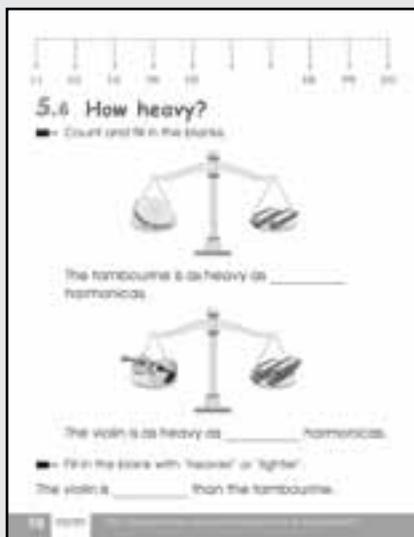
- Ask pupils to look at Activity 5.5.
- Read the instruction, 'Circle the correct answer.'
- Point to the first question and elicit that the harmonium is heavier than the flute. Ask pupils to circle 'heavier' with pencil.
- Repeat for the second question. (accordion is lighter), and the third question. (harmonica is lighter)

Additional activities

Activity 3

- Give pupils Worksheet 64.
- Ask them to draw objects that are heavier / lighter.

5.6 How heavy?



Suggested duration

40 minutes

Objectives

- Compare mass using non-standard units of measurement.

Required resources

- scale
- non-standard units of measurement (example: marbles, oranges)
- Additional: worksheets to draw the correct number of non-standard units

Key terms

tambourine

harmonica

violin

Comparing mass using non-standard units of measurement

Activity 1

- Bring a scale to class to compare the weights of 2 objects.
- Explain that you are going to find the weight of a harmonica in terms of marbles.

- Place a harmonica on the left side of the scale and place marbles on the other side one by one. Pupils should see that the scale will initially tilt towards the harmonica but will slowly tilt the other way as more marbles are added.
- Add marbles until the scale is balanced. (e.g. 15 marbles)
- Ask pupils to repeat after you, 'The harmonica is as heavy as 15 marbles.'
- Repeat the activity using other non-standard units of measurements like oranges to balance different instruments.
- Ask pupils to come to the front of the class and balance the scales themselves.

Activity 2

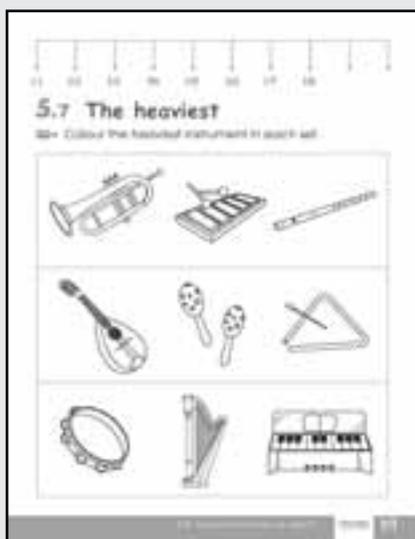
- Ask pupils to look at Activity 5.6.
- Read the instruction, 'Count and fill in the blanks.'
- Point to the first question and elicit that the scale is balanced.
- Ask pupils to count the harmonicas used to balance the tambourine and write 2 in the blank.
- Read together, 'The tambourine is as heavy as 2 harmonicas.'
- Repeat for the second question. (5)
- Read the instruction, 'Fill in the blank with 'heavier' or 'lighter'.'
- Guide pupils to write 'heavier' in the blank and read together, 'The violin is heavier than the tambourine.'

Additional activities

Activity 3

- Give pupils Worksheet 65. Tell them that a pineapple is as heavy as 8 oranges and a guitar is as heavy as 20 marbles.
- Ask them to draw the correct number of non-standard units to balance the objects.

5.7 The heaviest



Suggested duration

40 minutes

Objectives

- Compare the mass of objects.

Required resources

- flashcards of different musical instruments
- Additional:
worksheet to circle the heaviest object

Key terms

heaviest

instrument

Comparing the mass of objects

Activity 1

- Ask pupils to form groups of 4 or 5 and number themselves 1 to 5 to establish the order in which they play the rounds.
- Display flashcards of 3 different musical instruments on the board. Ask pupils to identify them.
- Ask, 'Which is the heaviest?' Pupil 1 from each group should run to take the flashcard of the heaviest instrument.
- The fastest pupil with the correct answer scores a point for the team.
- Repeat the activity for the second, third, fourth and fifth round etc.
- The team with the most points at the end of the game wins.

Activity 2

- Ask pupils to look at Activity 5.7.
- Read the instruction, 'Colour the heaviest instrument in each set.'
- Ask pupils to look at the first set of instruments. Elicit that the trumpet is the heaviest, and ask pupils to colour it.
- Repeat for the second set, (sitar) and third set. (piano)

Additional activities

Activity 3

- Ask pupils to name the heaviest instrument they have seen.

Activity 4

- Give pupils Worksheet 66. Ask them to circle the heaviest object in each set.

5.8 Let's play music



Suggested duration

40 minutes

Objectives

- Compare the mass of objects.

Required resources

- flashcards of different musical instruments
- Additional:
worksheet to circle the lightest sea animal

Key terms

lightest

instrument

Comparing the mass of objects

Activity 1

- Ask pupils to form groups of 4 or 5 and number themselves 1 to 5 as in previous unit.
- Display flashcards of 3 different musical instruments on the board and ask pupils to identify them.
- Play as in the previous unit, asking pupils to identify the lightest instrument each time.

Activity 2

- Ask pupils to look at Activity 5.8.
- Read the instruction, 'Colour the child with the lightest instrument.'
- Ask pupils to point to the child with the lightest instrument.
- If pupils are unable to identify the child with the lightest instrument, teach them the process of comparing pairs of instruments and eliminating the heaviest each time, and elicit that the maracas are the lightest.
- Ask pupils to colour the child holding the maracas.

Additional activities

Activity 3

- Give pupils Worksheet 67.
- Ask them to circle the lighter sea animal in each set.

Introduction

In this unit, pupils look back at the concepts they have learned in the previous five units. By the end of the unit pupils should be able to complete activities related to these concepts with accuracy and confidence.



UNIT 6

Pre-assessment activity

- Recall and revise activities carried out in the previous five units and the concepts learned: addition by counting in groups; subtraction by crossing out; using ordinal numbers to identify position and rank sets by size; use of non-standard units of measurement for capacity; time; comparison of objects by mass.

6.1 Eggs in the baskets

A worksheet titled '6.1 Eggs in the baskets' with a 'LET'S REVISE' banner at the top right and a 'UNIT 6' badge. It shows two baskets: 'Aisha's basket' and 'Maha's basket'. Each basket contains two circular groups of eggs. Below the baskets are instructions: 'Divide groups of 2 eggs in each basket' and 'Count and fill in the blanks'. The blanks are: 'Aisha has _____ groups of eggs', 'Maha has _____ groups of eggs', 'How many more groups of eggs does Maha need to have as many eggs as Aisha?', and 'Maha needs _____ more groups of eggs'.

Suggested duration

40 minutes

Objectives

- Reinforce number sentences and grouping.

Required resources

- lollipops bundled in groups of 3
- Additional: worksheet to draw more to make equal numbers of groups

Key terms

egg
basket

Reinforcing number sentences and grouping

Activity 1

- Prepare 12 bundles of lollipops in groups of 3.
- Ask 2 pupils to come to the front of the class; give the first pupil 4 of the bundles, and the second 6.
- Ask the first pupil, 'How many groups of 3 lollipops do you have?' (4)
- Ask the second pupil, 'How many groups of 3 lollipops do you have?' (6)
- Ask the first pupil, 'How many more groups of lollipops do you need to have the same number of lollipops as the second pupil?' (2)

- Give the first pupil 2 more bundles of 3 lollipops and elicit that now they have the same number of lollipops.

Activity 2

- Ask pupils to look at Activity 6.1.
- Read the instruction, 'Circle groups of 3 eggs in each basket.'
- Ask pupils to count every 3 eggs in each basket and circle them.
- Read the instruction, 'Count and fill in the blanks.'
- Ask, 'How many groups of eggs does Naila have?' (3 in each basket = 6)
- Ask pupils to write 6 in the first blank and read together, 'Naila has 6 groups of eggs.'
- Ask, 'How many groups of eggs does Maria have?' (2 in each basket = 4)
- Ask pupils to write 4 in the second blank and read together, 'Maria has 4 groups of eggs.'
- Read the question, 'How many more groups of eggs does Maria need to have as many eggs as Naila?'
- Guide pupils to write the subtraction sentence $6 - 4 = 2$, and to write 2 in the last blank.
- Read together, 'Maria needs 2 more groups of eggs.'

Additional activities

Activity 3

- Give pupils Worksheet 68.
- Ask pupils to circle groups of 3 and draw more on the right to make equal numbers of groups.

6.2 The magician's hat

6.2 The magician's hat

• Add or subtract and fill in the blanks.

$12 + 8 = \dots$	N	$15 - 4 = \dots$	P
$12 + 2 = \dots$	O	$15 - 8 = \dots$	I
$14 + 1 = \dots$	Q	$14 - 2 = \dots$	R

• What will come out of the magician's hat?

11 10 15 24 9 15

Suggested duration

40 minutes

Objectives

- Reinforce addition and subtraction.

Required resources

- flashcards of different number sentences
- Additional:
worksheet to match addition and subtraction sentences

Key terms

water bottles

Reinforce addition and subtraction

Activity 1

- Ask pupils to form groups of 4 or 5.
- Show flashcards of addition and subtraction sentences.
- The first pupil to raise his/her hand and give the correct answer scores a point for his/her group.
- Continue showing addition and subtraction sentences for pupils to solve.
- The group with the most points at the end of the activity wins.

Activity 2

- Ask pupils to look at Activity 6.2.
- Read the instruction, 'Add or subtract and fill in the blanks.'
- Ask, 'What is $12 + 4$?' Pupils should count forwards from 12 to 16.
- Ask pupils to write 16 in the first blank.
- Repeat for $15 - 4$. (11)
- Ask pupils to complete the rest of the addition and subtraction sentences themselves.
- Read the question, 'What will come out of the magician's hat?'
- Ask, 'Which letter corresponds to 11?' (P)
- Ask which letters correspond to 12, 13, 14, 15, and 16 respectively and pupils should fill in the blanks to write P-I-G-E-O-N.

Additional activities

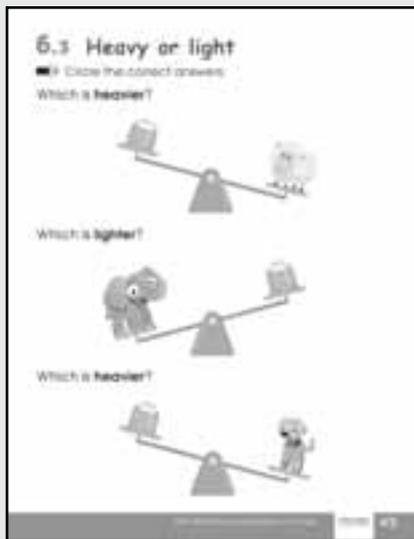
Activity 3

- Ask pupils if they have seen magic shows.
- Ask what usually comes out of a magician's hat, e.g. rabbits, a colourful scarf, etc.

Activity 4

- Give pupils Worksheet 69.
- Ask the pupils to complete the addition/subtraction sentences and match those which have the same answers.

6.3 Heavy or light



Suggested duration

40 minutes

Objectives

- Reinforce comparison of mass.

Required resources

- flashcards of different animals
- Additional:
worksheet to draw objects on the correct side of the scale

Key terms

heavier

lighter

Reinforcing comparison of mass

Activity 1

- Ask a pupil to come to the front of the class and give him/her 2 flashcards showing different animals.
- Ask the pupil to tilt his hand and body downwards to the side with the heavier animal.
- Repeat the activity with different pupils and different pairs of flashcards. The rest of the class checks that the pupil indicates the heavier or lighter animal correctly.

Activity 2

- Ask pupils to look at Activity 6.3.
- Read the instruction, 'Circle the correct answers.'
- Read the first question, 'Which is heavier?'
- Remind pupils that the scale tilts to the side of the heavier object, so the object that is lower down on the see-saw is the heavier object.
- Elicit that the sheep is heavier than the bag of wool, and ask pupils to circle the sheep.
- Read the second question, 'Which is lighter?'
- Elicit that the bag of wool is lighter than the elephant and ask pupils to circle the bag of wool.
- Read the third question, 'Which is heavier?'
- Elicit that the puppy is heavier than the bag of wool, and ask pupils to circle the puppy.

Additional activities

Activity 3

- Give pupils Worksheet 70.
- Ask them to draw the objects on the correct sides of the scales.

6.4 Food



Suggested duration

40 minutes

Objectives

- Reinforce the use of non-standard units of measurement of mass.

Required resources

- scale
- non-standard units of measurement (example: oranges, erasers)
- apples, bananas, etc.
- Additional:
worksheets to circle the correct number of non-standard units

Key terms

heavy fish
egg crab

Reinforce the use of non-standard units of measurement of mass

Activity 1

- Show pupils a scale and explain that you want to know the weight of an apple in terms of numbers of erasers.
- Place the apple on one side of the scale, and slowly add erasers to the other side. Pupils should observe how the tilt of the scale changes as more erasers are added, e.g. 10 erasers.
- Elicit that 'The apple is as heavy as 10 erasers.'
- Repeat the activity using other non-standard units of measurements to balance different fruits.

Activity 2

- Ask pupils to look at Activity 6.4.
- Read the instruction, 'Count and fill in the blanks.'
- Read the first question and elicit that the scale is balanced.
- Ask pupils to count the eggs used to balance the fish, and write 4 in the blank.
- Read together, '1 fish is as heavy as 4 eggs.'
- Repeat for the second question and read together, '1 crab is as heavy as 3 eggs.'
- Read the instruction, 'Fill in the blank with 'heavier' or 'lighter.'
- Elicit that the fish is heavier than the crab and ask pupils to write 'heavier' in the blank.

Additional activities

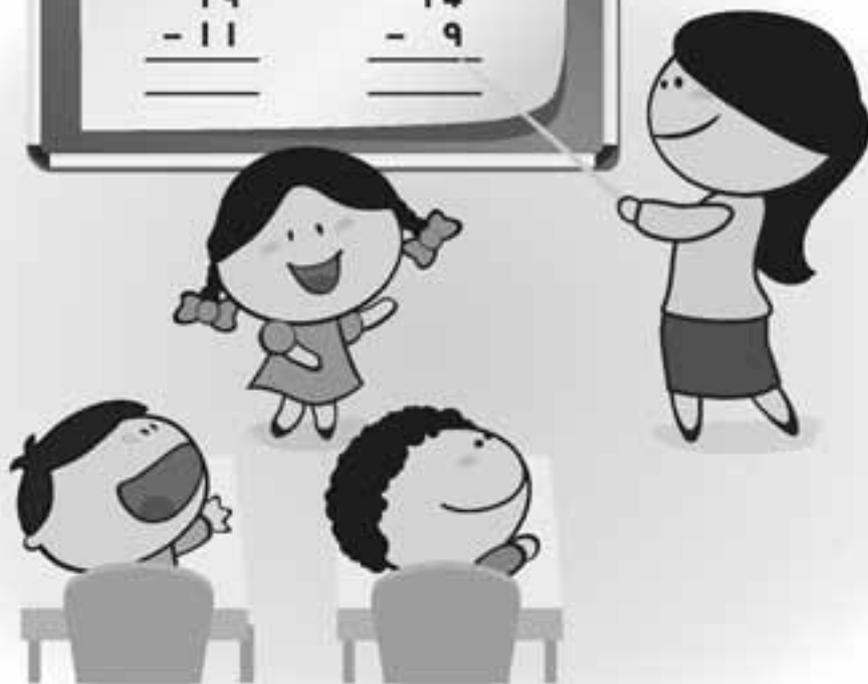
Activity 3

- Give pupils Worksheet 71.
- Tell pupils that a pineapple is as heavy as 4 apples and a watermelon is as heavy as 10 apples.
- Ask them to circle the correct pictures.

New Syllabus

PRE-PRIMARY MATHEMATICS TEACHING GUIDE

C4



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Introduction

In this unit, pupils look back at the concepts they learned in the previous book before they learn new concepts. By the end of the unit pupils should be able to apply learned concepts with accuracy and confidence.

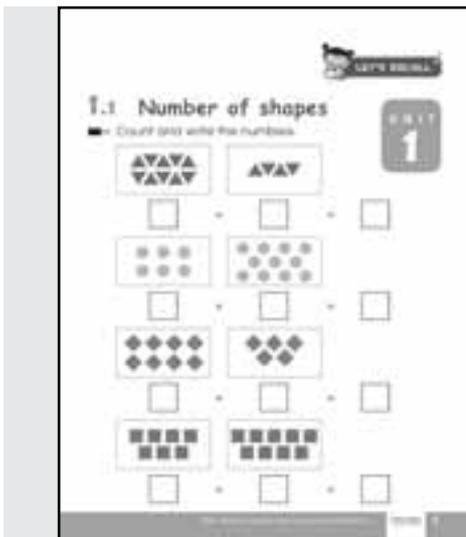


Pre-assessment activity

- Recall and revise the activities pupils carried out in the previous term: adding on from 10; subtraction stories; telling the time on the hour; comparing the mass of different objects.



1.1 Number of shapes



Suggested duration

40 minutes

Objectives

- Write number sentences for addition.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to draw more shapes and add

Writing number sentences for addition

Activity 1

- Show a flashcard of a set of objects and ask pupils to identify and count the objects.
- Show a second flashcard of a set of the same items and ask, 'How many are there altogether?'
- Ask a pupil to write the addition sentence on the board.
- Repeat the activity with different pairs of flashcards.

Activity 2

- Ask pupils to look at Activity 1.1.
- Read the instruction, 'Count and write the numbers.'
- Ask pupils to count the triangles in the first set, (10) and write 10 in the box below.
- Repeat for the second set of triangles. (4)

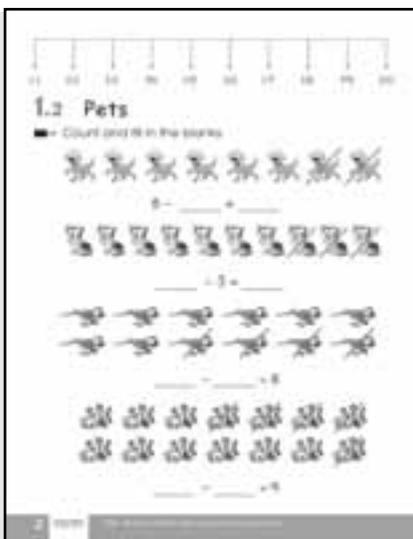
- Elicit that $10 + 4 = 14$ and ask the pupils to write 14 in the third box.
- Ask pupils to complete the remaining questions in the same way themselves.

Additional activities

Activity 3

- Give pupils Worksheet 72.
- Ask pupils to draw more shapes and fill in the blanks.

1.2 Pets



Suggested duration

40 minutes

Objectives

- Write number sentences for subtraction.

Required resources

- flashcards of pictures
- Additional:
worksheet to write subtraction sentences

Writing number sentences for subtraction

Activity 1

- Show 10 pictorial flashcards of the same single item, e.g. 10 books.
- Ask 1 pupil to remove 5 books and say how many books remain. (5)
- Help the pupil to write the subtraction sentence $10 - 5 = 5$ on the board
- Repeat the activity with different flashcards and numbers.

Activity 2

- Ask pupils to look at Activity 1.2.
- Read the instruction, 'Count and fill in the blanks.'
- Explain the first example: elicit that there are 8 dogs and that 8 is the first term of the subtraction sentence.
- Elicit that 2 dogs are crossed out and ask them to write 2 as the second term.
- Ask, 'What is $8 - 2$?' Pupils should count backwards to 6 and write 6 as the third term in the subtraction sentence.

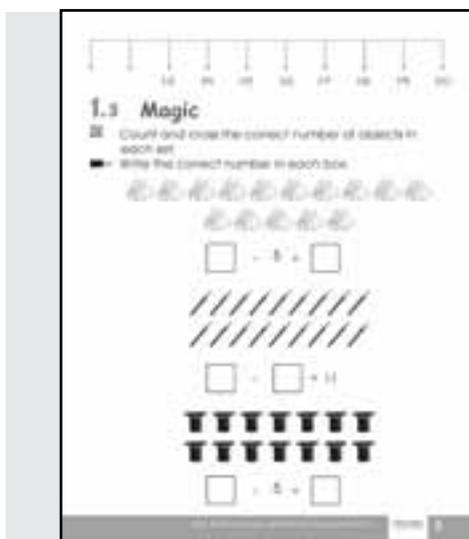
- Work through the second question in the same way. ($10 - 3 = 7$)
- Ask pupils to complete the other 2 questions themselves.

Additional activities

Activity 3

- Give pupils Worksheet 73.
- Ask them to write the subtraction sentences.

1.3 Magic



Suggested duration

40 minutes

Objectives

- Write number sentences for subtraction.

Required resources

- carrots
- Additional:
worksheet to cross out and write the subtraction sentence

Writing number sentences for subtraction

Activity 1

- Ask 10 pupils to come to the front of the class and act as rabbits.
- Place 3 carrots on the floor. Ask the rabbits to hop to get the carrots. 3 'rabbits' should get carrots.
- Ask, 'How many rabbits did not get carrots?'
- Guide pupils to write the subtraction sentence $10 - 3 = 7$.
- Repeat with 13 carrots and ask, 'How many carrots are left?' ($13 - 10 = 3$)
- Repeat the activity, varying the number of rabbits and carrots.

Activity 2

- Ask pupils to look at Activity 1.3.
- Read the instructions, 'Count and cross the correct number of objects in each set.' and 'Write the correct number.'
- Look at the first question. Elicit that there are 15 rabbits and ask pupils to write 15 in the first box.

- Elicit that they should cross out 5 rabbits and ask them to do this.
- Ask, 'How many rabbits are left?' (10) Ask them to write 1 in the second box.
- Work through the second question. Elicit that there are 18 magic wands and ask them to write 18 in the first box.
- Elicit that 11 wands are left. Guide pupils to cross out magic wands until 11 remain. Elicit that they have crossed out 7 and ask them to write 7 in the second box of the second question.
- Ask pupils to complete the third question themselves.

Additional activities

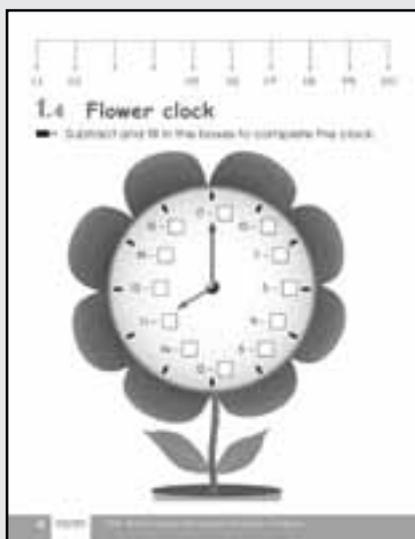
Activity 3

- Ask pupils to raise their hands if they know magic tricks.
- Ask pupils to demonstrate their magic tricks.

Activity 4

- Give pupils a worksheet showing sets of objects.
- Ask pupils to cross out a certain number of each set and write the subtraction sentence to show how many remain.

1.4 Flower Clock



Suggested duration

40 minutes

Objectives

- Write number sentences for given numbers.

Required resources

- analogue clock
- flashcards of subtraction sentences
- Additional:
construction paper with template of subtraction sentences
glue

Key terms

clock

Writing number sentences for given numbers

Activity 1

- Draw a large clock face on the board.
- Use an analogue clock to revise the numbers on a clock face.
- Show flashcards of subtraction sentences and ask pupils to solve them. For example, show $10 - 1$; pupils should say 9.
- Ask a pupil to fix the flashcard on the board in the position of the number 9 on the clock face.
- Repeat the activity with different flashcards until the clock face is complete.

Activity 2

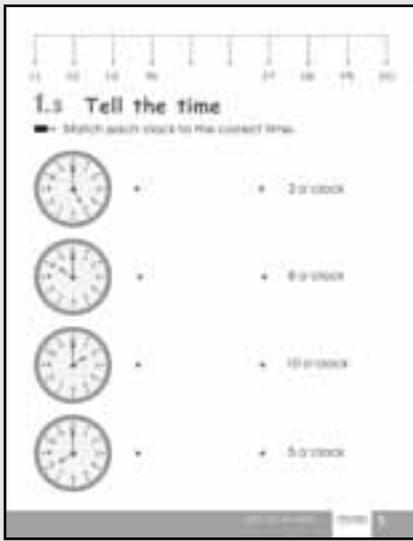
- Ask pupils to look at Activity 1.4.
- Read the instruction, 'Subtract and fill in the boxes to complete the clock.'
- Ask pupils to point to the position of number 1 on the clock face, and read the question ' $10 - \underline{\quad}$.'
- Count backwards together from 10 to 1 to elicit that 9 should be subtracted. Ask pupils to write 9 in the box.
- Repeat for the number 2 on the clock face, ($7 - 5 = 2$) and for number 3. ($5 - 2 = 3$)
- Ask pupils to complete the rest of the subtraction sentences themselves.

Additional activities

Activity 3

- Give each pupil a worksheet of 10 subtraction sentences glued onto construction paper. The answers to the questions should be the numbers 1 to 10.
- Ask pupils to complete each subtraction sum, cut out each sentence, and arrange them in order from 1 to 10.

1.5 Tell the time



Suggested duration

40 minutes

Objectives

- Tell the time.

Required resources

- flashcards of 1 to 12 o'clock
- analogue clock
- Additional:
worksheet to write the correct time on the clock

Key terms

clock

time

Telling the time

Activity 1

- Use an analogue clock to revise telling the time on the hour.
- Place the hands at 1 o'clock and ask, 'What time is it?' Pupils should say '1 o'clock.'
- Show the flashcard of 1 o'clock to revise writing 1 o'clock in words.
- Repeat for times from 2 to 12 o'clock.

Activity 2

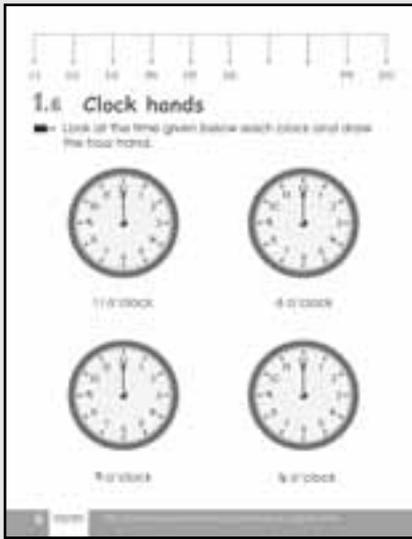
- Ask pupils to look at Activity 1.5.
- Read the instruction, 'Match each clock to the correct time.'
- Ask pupils to look at the first clock and elicit that it shows 5 o'clock.
- Ask them to point to 5 o'clock in the second column and use a ruler and pencil to match the clock and the written time.
- Repeat for the second clock and ten o'clock.
- Ask pupils to match the other 2 clocks to the correct times themselves.

Additional activities

Activity 3

- Give pupils Worksheet 74.
- Ask the pupils to write the correct times in the boxes.

1.6 Clock hands



Suggested duration

40 minutes

Objectives

- Draw the hour hand on a clock to show a given time.

Required resources

- felt clock, felt hour hand
- Additional:
worksheet with activities at different times of the day

Key terms

time

clock

hour hand

Drawing the hour hand on a clock to show a given time

Activity 1

- Place a large felt clock on the board.
- Ask pupils to form groups of 4 or 5 and give each group a felt hour hand.
- Explain that you will say a time, and when you say 'Go', one member of each team should race to the board and fix the hour hand in the correct position on the clock. The first pupil to do so correctly scores a point for his/her team.
- Pupils could take turns to call out times for pupils in the other groups to show.
- The team with the most points at the end of the activity wins.

Activity 2

- Ask pupils to look at Activity 1.6.
- Read the instruction, 'Look at the time given below each clock and draw the hour hand.'
- Elicit that the first clock says 11 o'clock and that the hour hand should point to 11.
- Ask pupils to draw an hour hand pointing to 11 on that clock.
- Remind pupils that the hour hand must be shorter than the other hand on the clock.
- Repeat for the second clock. (6 o'clock)
- Ask pupils to draw in the hour hands on the other 2 clocks themselves.

Additional activities

Activity 3

- Give each pupil a worksheet showing activities from different times of day, and 3 clocks showing different times for each. One of the clocks should show the correct time for that particular activity.
- Ask pupils to look at the activities and colour the clock that shows the correct time of day.

1.7 On the see-saw



Suggested duration

40 minutes

Objectives

- Use the term 'heavier' to compare the mass of two items.

Required resources

- flashcards of different objects
- Additional:
worksheet to identify the heavier object

Key terms

heavier

see-saw

Using the term 'heavier' to compare the mass of two items

Activity 1

- Ask one pupil to come to the front of the class and give him/her 2 flashcards showing different objects.
- Ask the pupil to tilt his hand and body downwards to the side with the heavier object.
- Repeat the activity with different pupils and flashcards. The other pupils should indicate whether he/she has made the correct comparison.

Activity 2

- Ask pupils to look at Activity 1.7.
- Read the instruction, 'Colour to show which is heavier on each see-saw.'
- Ask pupils to look at the first see-saw. Remind them that the scale tilts down on the side of the heavier object, so the person who is lower on the see-saw is heavier.
- Elicit that the boy is heavier and ask pupils to colour the boy.

- Ask pupils to look at the second see-saw. Elicit that they should colour the dog because it is heavier than the cat.
- Ask pupils to look at the third see-saw. Elicit that they should colour the boy because he is heavier than the cat.

Additional activities

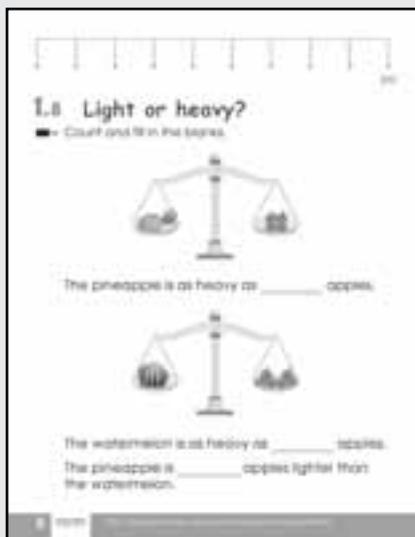
Activity 3

- Play a game of see-saw to compare pupils' weights.
- Encourage pupils to say, 'I am heavier than ___.' or 'I am lighter than ___.'

Activity 4

- Give pupils Worksheet 75.
- Ask them to circle the heavier of each pair of objects.

1.8 Light or heavy?



Suggested duration

40 minutes

Objectives

- Compare mass using non-standard measurements.

Required resources

- scale
- fruits
- non-standard units of measurement (example: marbles, pears)
- Additional: worksheets to count and write the number of non-standard units

Key terms

pineapple apples
 watermelon heavy
 light

Comparing mass using non-standard measurements

Activity 1

- Place an apple on one side of a scale. Explain that you are going to use a scale to find out the weight of an apple in terms of numbers of marbles.

- Place marbles one by one on the opposite side of the scale until it is balanced. (e.g. 7 marbles) Pupils should observe that initially, the scale will be tilted down on the apple side but this changes as marbles are added to the other side.
- Ask pupils to repeat after you, 'The apple is as heavy as 7 marbles.'
- Repeat the activity using other non-standard units of measurements and different fruits.

Activity 2

- Ask pupils to look at Activity 1.8.
- Read the instruction, 'Count and fill in the blanks.'
- Look at the first question and elicit that the scale is balanced.
- Ask pupils to count the apples that balance the pineapple, (4) and write 4 in the blank.
- Read together, 'The pineapple is as heavy as 4 apples.'
- Repeat for the second question. (6 apples = watermelon)
- Read together, 'The watermelon is as heavy as 6 apples.'
- Ask, 'How many more apples are needed to balance the watermelon compared to the pineapple?' (2).
- Ask pupils to write 2 in the third blank and read together, 'The pineapple is 2 apples lighter than the watermelon.'

Additional activities

Activity 3

- Give pupils a worksheet showing scales with objects on the left balanced by various numbers of non-standard units on the right. Each question should also have the text: e.g. 'The plant is as heavy as _____ apples'.
- Ask the pupils to count the non-standard units and fill in the blanks.

Introduction

In this unit, pupils are introduced to the numbers 1 to 100. By the end of the unit, pupils should be able to write and understand values up to 100 and recognize the associated number words, and count in sets of 2, 5 and 10.



Pre-assessment activity

- Use flashcards to revise numbers 1 to 20.
- Ask what number comes after 20.
- Use building blocks to introduce the numbers 21 – 30. Spell out the word thirty.
- Continue adding building blocks as pupils count on their fingers. They should realise that once they reach the number e.g.10, they have to start counting their fingers a second time.
- Introduce the idea of counting in 2s, 5s or 10s.
- Place 100 building blocks in front of class and say, '100 building blocks.'

2.1 Counting shapes



Suggested duration

1 hour

Objectives

- Write and understand the values of numbers from 21 to 25.

Required resources

- building blocks
- flashcards of numbers 20 to 25
- Additional:
drawing paper
circular stickers

Writing and understanding the values of numbers from 21 to 25

Activity 1

- Show pupils 20 building blocks and the flashcard of number 20. Ask them to say the number.
- Add one building block and elicit that there are 21 building blocks.
- Show the flashcard of 21, place it on the board and ask pupils to say 21 3 times.
- Repeat the activity, adding one block at a time until there are 25 building blocks.
- Write the numbers 21 to 25 on the board again and ask pupils to trace them in the air as you do so.

Activity 2

- Ask pupils to look at Activity 2.1.
- Read the instruction, 'Count the shapes and write the numbers.'
- Ask pupils to look at the first question and draw one circle round the 2 groups of 10 to form a group of 20. Point to the 1 remaining square and elicit that the total number of squares is 21.
- Ask them to trace the number 21 with a finger before writing it in the space.
- Ask pupils to spell out the words twenty-one
- Repeat for the remaining questions (22 – 25), forming a group of 20 each time and adding the extra shapes to find the totals.

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and circular stickers.
- Ask them to stick 20 stickers on the paper and write the number 20.
- Ask them to add one more sticker and write next to it 21.
- Repeat until there are 25 stickers.

2.2 Count more shapes

2.2 Count more shapes

Count the shapes and write each number

	Twenty six	26
	Twenty seven	27
	Twenty eight	28
	Twenty nine	29
	Thirty	30

Suggested duration

1 hour

Objectives

- Write and understand the values of numbers from 26 to 30.

Required resources

- building blocks
- flashcards of numbers 26 to 30
- Additional:
cardboard photo frame

Writing and understanding the values of numbers from 26 to 30

Activity 1

- Use building blocks as in Activity 1 Unit 2.1 to introduce the numbers 26 to 30.

Activity 2

- Ask pupils to look at Activity 2.2.
- Read the instruction, 'Count the shapes and write each number'.

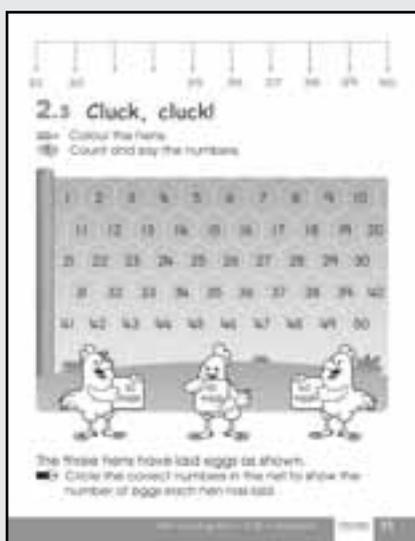
- Proceed as for Activity 2 Unit 2.1 to practise counting, saying, writing, and spelling numbers 26 to 30.

Additional activities

Activity 3

- Give each pupil a photo frame made by cutting a rectangle from the centre of a sheet of card.
- Ask them to draw 30 shapes of different sizes around the frame to decorate it.
- Ask pupils to show their frames to the class, and check that they have drawn 30 shapes.

2.3 Cluck, cluck!



Suggested duration

40 minutes

Objectives

- Counting from 1 to 50 in sequence.

Required resources

- 50 plastic eggs
- Additional:
worksheet to fill in the missing numbers

Key terms

hen

egg

net

Counting from 1 to 50 in sequence

Activity 1

- Hide 50 plastic eggs around the classroom.
- Ask pupils to pretend to be hens and cluck as they search for the eggs.
- Once they have found all the eggs, count them together.
- When pupils reach 30, teach them to count on to 50. Write each number on the board as you count.

Activity 2

- Ask pupils to look at Activity 2.3.
- Read the instruction, 'Colour the hens.' Ask pupils to point to the 3 hens and colour them.
- Read the instruction, 'Count and say the numbers.'

- Point to and count together the sequence of numbers from 1 to 50.
- Read the statement, 'The three hens have laid eggs as shown.'
- Ask pupils how many eggs each hen has laid. (50; 30; 40)
- Read the instruction, 'Circle the correct numbers in the net to show the number of eggs each hen has laid.'
- Point to the first hen and ask pupils to point to the number 50 in the net and circle it in pencil.
- Repeat for the second hen, (30) and the third hen. (40)

Additional activities

Activity 3

- Give pupils Worksheet 76,
- Ask them to fill in the missing numbers.

2.4 At the doctor's



Suggested duration

40 minutes

Objectives

- Count and recognize values up to 50.

Required resources

- different sets of objects
- Additional:
worksheet to count up to 50

Key terms

stethoscope
tablet
bottle of syrup
handi-plast

Counting and recognizing values up to 50

Activity 1

- Place sets of objects, e.g. 30 pencils, in boxes and ask pupils to guess how many pencils there are.
- Count the pencils together and ask pupils to repeat after you, 'There are 30 pencils.'
- Reward the pupil who made the closest estimate of the number of pencils.
- Repeat the activity with different numbers of other objects.

Activity 2

- Ask pupils to look at and identify the items shown in Activity 2.4.
- Read the instruction, 'Count and write the numbers.'
- Point to the stethoscopes and count them together. (23)
- Ask pupils to write 23 in the box below. Ask them to say, '23 stethoscopes'.
- Count the other items in the same way and write the numbers.

Additional activities

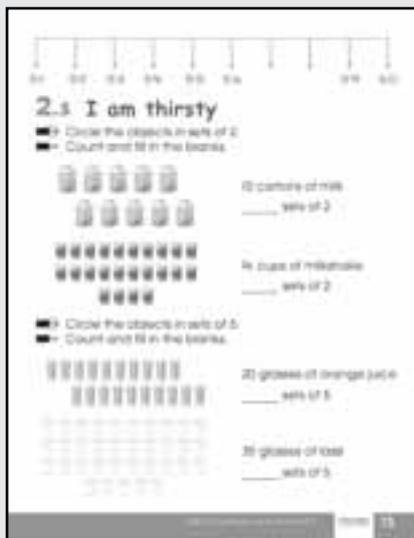
Activity 3

- Ask pupils to raise their hands if they have been to see the doctor.
- Did the doctor use a stethoscope and give them some medicine?
- Ask pupils to relate their experiences of doctors.

Activity 4

- Give pupils Worksheet 77.
- Ask them to count and write the numbers.

2.5 I am thirsty



Suggested duration

40 minutes

Objectives

- Count in sets of 2 and 5.

Required resources

- pencils
- rubber bands
- Additional:
worksheet to count in sets of 2 and 5

Key terms

carton
milk
milkshake
orange juice
lassi

Counting in sets of 2 and 5

Activity 1

- Place 20 pencils in front of class and ask 10 pupils to take 2 pencils each. Ask them to tie the 2 pencils together using rubber bands.
- Ask, 'How many sets of 2 are there?' Pupils should see that it is the same as the number of pupils. (10)
- Ask the pupils to count in 2s; the first should say 2, the second 4, and so on.
- Recite together, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.
- Repeat with 50 pencils, ask 10 pupils to take 5 pencils each, and count in 5s.

Activity 2

- Ask pupils to look at Activity 2.5.
- Read the instruction, 'Circle the objects in sets of 2.' Ask pupils to circle the cartons of milk in 2s.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that there are 5 sets of 2 and ask pupils to write 5 in the blank.
- Read together, '10 cartons of milk. 5 sets of 2.'
- Repeat for the milkshakes. (12 sets of 2)
- Read the instruction, 'Circle the objects in sets of 5.' Ask pupils to circle sets of 5 glasses of orange juice.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that there are 4 sets of 5 and ask pupils to write 4 in the blank.
- Read together, '20 glasses of orange juice. 4 sets of 5.'
- Repeat for the glasses of lassi. (7 sets of 5)

Additional activities

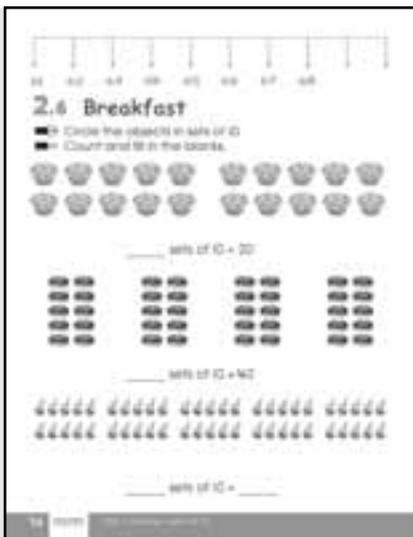
Activity 3

- Take a survey to see which drink pupils like most, milk, milkshake, orange juice, or lassi.

Activity 4

- Give pupils Worksheet 78.
- Ask pupils to count in 2s or 5s and write the numbers.

2.6 Breakfast



Suggested duration

40 minutes

Objectives

- Count in sets of 10.

Required resources

- pencils
- rubber bands
- Additional:
worksheet to count in sets of 10

Counting in sets of 10

Activity 1

- Place 30 pencils in front of class. Ask 3 pupils to take 10 pencils each and tie them together using rubber bands.
- Ask, 'How many sets of 10 are there?' Pupils should see that it is the same as the number of pupils. (3)
- Ask the pupils to count in 10s; the first should say 10, the second 20, and the third 30.
- Recite with the pupils 10, 20, 30.
- Repeat with 50 pencils and 5 pupils.

Activity 2

- Ask pupils to look at Activity 2.6.
- Read the instruction, 'Circle the objects in sets of 10.' Ask pupils to circle the cupcakes in sets of 10.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that there are 2 sets of 10 cupcakes and ask pupils to write 2 in the blank.
- Read together, '2 sets of 10 = 20.'
- Repeat for the doughnuts. (4)
- Read together, '4 sets of 10 = 40.'
- Ask pupils to complete the third question themselves.

Additional activities

Activity 3

- Give each pupil Worksheet 79.
- Ask pupils to count in 10s and write the number.

2.7 Fried eggs



Suggested duration

40 minutes

Objectives

- Count in sequence from 51 to 100.

Required resources

- worksheets to fill in the missing numbers

Counting in sequence from 51 to 100

Activity 1

- Ask pupils to stand in a circle.
- Ask the first pupil to say 1, the second to say 2, the third to say 3, etc., counting in sequence to 100.
- Any pupil who says 10 or a multiple of 10 should sit down
- Repeat the activity until there is only 1 pupil left standing.

Activity 2

- Ask pupils to look at Activity 2.7.
- Read the instruction, 'Count and say the numbers.'
- Point to and count together the sequence of numbers from 51 to 100.
- Ensure that pupils are familiar with the number sequence from 51 to 100.

Additional activities

Activity 3

- Ask pupils to raise their hands if they like fried eggs.
- Ask how many fried eggs they usually eat.

Activity 4

- Give pupils Worksheet 80.
- Ask them to fill in the missing numbers.

2.8 Number words



Suggested duration

40 minutes

Objectives

- Associate numbers to the corresponding number words.

Required resources

- flashcards of numbers 0 to 100 (multiples of 10)
- flashcards of number words (multiples of 10)
- Additional:
worksheet to write the number or the number words

Associating numbers to the corresponding number words

Activity 1

- Show a flashcard of 0. Ask pupils to say the number and spell the word. (z-e-r-o)
- Show the flashcard of zero and place the 2 flashcards together on the board.
- Repeat for 10/ten and all multiples of 10 to 100/a hundred.

Activity 2

- Ask pupils to look at Activity 2.8.
- Read the, question, 'How many number words from 1 to 100 can you remember?'
- Read the instruction, 'Match the numbers to the correct number words.'
- Elicit that the first word says 20. Ask pupils to use a pencil and ruler to join the word twenty in the first column to the number 20 in the second column.
- Repeat for the remaining questions.

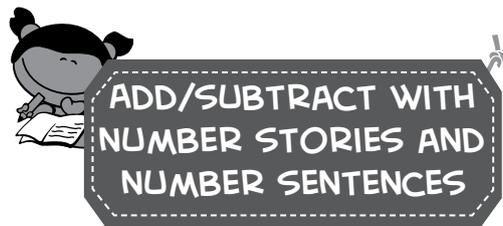
Additional activities

Activity 3

- Give pupils Worksheet 81.
- Ask them to write the missing numbers or number words.

Introduction

In this unit, pupils learn to add and subtract up to 20. By the end of this unit pupils should be able to perform horizontal and vertical addition up to 20, horizontal and vertical subtraction of numbers up to 20, and complete number sentences by adding the correct signs.



Pre-assessment activity

- Show pairs of flashcards of sets of objects, e.g. 4 apples and 9 apples, and ask students to write horizontal and vertical addition sentences for the cards. ($4 + 9 = 13$) Show other pairs of flashcards. Ask pupils to write horizontal and vertical subtraction sentences to answer the question, 'How many more are there on flashcard 1?'
- Show flashcards of horizontal addition and
- Subtraction sentences and ask pupils to tell you the answers and write the corresponding vertical addition and subtraction sentences on the board.



3.1 The Chef



Suggested duration

40 minutes

Objectives

- Complete horizontal addition sums for numbers up to 20.

Required resources

- flashcards of addition sentences
- flashcards of numbers 1 to 20
- Additional:
worksheet to add and colour the correct answer.

Horizontal addition of numbers up to 20

Activity 1

- Show flashcards of addition sentences and ask pupils to work out the answers.
- Show flashcards of numbers 1 to 20 one at a time and ask pupils to call 'Match!' when they see the card that shows the answer to the addition sentence.
- Place the 2 matching cards together on the board.

- Repeat with other cards until pupils can solve the addition sentences and identify the correct answers with relative ease.

Activity 2

- Ask pupils to look at Activity 3.1.
- Read the instruction, 'Add and then match to the correct answer.'
- Ask pupils to look at the first sum and to count on from 10 to find the answer. (13)
- Ask them to use a ruler and pencil to match $10 + 3$ in the first column to 13 in the second column.
- Repeat for the second question. ($6 + 8 = 14$)
- Ask pupils to match the other 3 addition sentences to the correct answers themselves.

Additional activities

Activity 3

- Ask pupils if they have seen a chef and to share their impressions of chefs.
- Pupils could draw a picture of a chef and share their pictures.

Activity 4

- Give pupils Worksheet 82
- Ask them to add and colour the correct number.

3.2 Books



Suggested duration

40 minutes

Objectives

- Complete vertical addition sums up to 20 using tens and ones.

Required resources

- flashcards of different sets of objects
- Additional:
vertical addition worksheet

Vertical addition up to 20, using tens and ones

Activity 1

- Show pupils pairs of flashcards of identical items, e.g. 9 books and 5 books.

- Guide them to count on from 9 to find the total number of books (14) and say, 'There are 14 books altogether.'
- Demonstrate how to write the addition sentence in a vertical form: Say, 'There are 9 books.' and write 9 on the board.
- Say 'And another 5 books.' and write + 5 below 9.
- Say, 'There are 14 books altogether.' and write 14 between the 2 lines.
- Repeat with other pairs of flashcards.

Activity 2

- Ask pupils to look at Activity 3.2.
- Read the instruction, 'Add and write the correct answers.'
- Look at the first sum and ask, 'What is $7 + 5$?' If necessary, write the horizontal addition sentence on the board.
- Ask pupils to count forwards from 7 to find the answer, (12) and to write the answer between the 2 horizontal lines.
- Repeat for the second sum. ($9 + 6 = 15$)
- Ask pupils to complete the other 2 sums themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they like to read books.
- How many books do pupils usually read in a week?

Activity 4

- Give pupils a worksheet showing vertical addition sums.
- Ask them to count on to add and to complete the sums correctly.

3.3 Flying



Suggested duration

40 minutes

Objectives

- Complete vertical addition sums up to 20 using tens and ones.

Required resources

- flashcards of different sets of objects
- place-value chart
- Additional:
worksheet to write and compute vertical addition sums

Vertical addition up to 20, using tens and ones

Activity 1

- Show flashcards of sets of the same items, e.g. 10 books and 8 books, and ask for the total number of books.
- Use a place-value chart like the one shown below to help pupils write the vertical addition sum.

Tens	Ones
1	0

Tens	Ones
0	8

- Explain that when writing a vertical addition sentence, the ones place of the digits should be on the right, while the tens place should be on the left.
- Write the vertical addition sentence for $10 + 8 = 18$.

Activity 2

- Ask pupils to look at Activity 3.3.
- Read the instruction, 'Add and write the correct answers.'
- Look at the first sum. Ask pupils to count forwards from 10 to 16 to answer the sum $10 + 6$, (16) and to write the answer between the 2 horizontal lines. Emphasize that 6 should be written in the ones column and 1 in the tens column.
- Repeat for the second sum. ($14 + 5 = 19$)
- Ask pupils to complete the other 2 sums themselves.

Additional activities

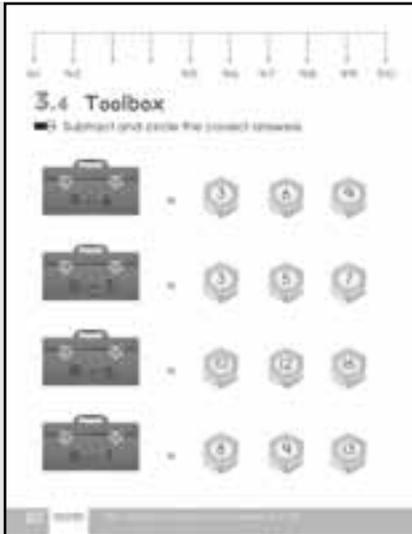
Activity 3

- Ask pupils to raise their hands if they would like to fly an airplane.
- Ask them to explain why they like flying.

Activity 4

- Give pupils Worksheet 83.
- Ask them to write the vertical addition sentence.

3.4 Toolbox



Suggested duration

40 minutes

Objectives

- Complete horizontal subtraction sums of numbers up to 20.

Required resources

- flashcards of subtraction sentences
- flashcards of numbers 1 to 20
- Additional:
worksheet to subtract and colour the correct answers

Horizontal subtraction of numbers up to 20

Activity 1

- Show a flashcard of a subtraction sentence and ask pupils to find the answer.
- Show flashcards of numbers 1 to 20 and ask pupils to say 'Match!' when they see the card that shows the answer.
- Place the 2 matching cards together on the board.
- Repeat with other cards until pupils can solve the subtraction sentences and identify the correct answers with relative ease.

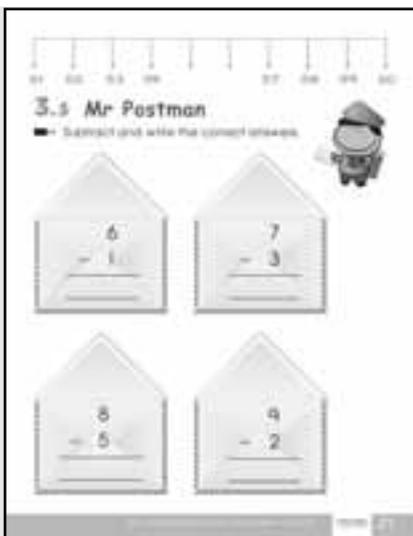
Activity 2

- Ask pupils to look at Activity 3.4.
- Read the instruction, 'Subtract and circle the correct answers.'
- Look at the first sum and guide pupils to count backwards to find and then circle the answer. ($10 - 3 = 7$)
- Repeat for the second question. ($10 - 3 = 7$)
- Ask pupils to complete the other 2 questions themselves.

Activity 3

- Give pupils Worksheet 84.
- Ask them to subtract, and colour the correct answers.

3.5 Mr Postman



Suggested duration

40 minutes

Objectives

- Complete vertical subtraction sums of numbers up to 20.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to practise vertical subtraction

Vertical subtraction of numbers up to 20

Activity 1

- Show a pair of flashcards of identical objects e.g. 9 books and 5 books.
- Ask how many more books are shown on the first card than on the second and guide pupils to count backwards from 9 to 5 to find the difference. (4)
- Demonstrate how to write the subtraction sentence in vertical form. Say, 'There are 9 books.' and write 9 on the board.
- Say, 'Subtract 5 books.' and write $- 5$ below 9.
- Say, 'There are 4 books more.' and write 4 between the 2 lines.
- Repeat with different pairs of flashcards.

Activity 2

- Ask pupils to look at Activity 3.5.
- Read the instruction, 'Subtract and write the correct answers.'
- Look at the first question and ask pupils to count backwards to find the answer. (5)
- Guide pupils to write the answer between the 2 horizontal lines.
- Repeat for the second question. ($7 - 3 = 4$)
- Ask pupils to complete the other 2 questions themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen postmen.
- Discuss the work of a postman.

Activity 4

- Give pupils a worksheet showing vertical subtraction sentences.
- Ask them to subtract and write the correct answers.

3.6 My Teacher



Suggested duration

40 minutes

Objectives

- Complete vertical subtraction sums for numbers up to 20.

Required resources

- flashcards of different sets of objects
- place-value chart
- Additional:
worksheet to write and compute vertical subtraction questions

Vertical subtraction of numbers up to 20

Activity 1

- Show a pair of flashcards of identical objects e.g. 18 books and 8 books. Ask pupils to subtract to find the difference.
- Use a place-value chart like the one shown, (as in Activity 1 in Unit 3.3) to help pupils write the vertical subtraction sentence.

Activity 2

- Ask pupils to look at Activity 3.6.
- Read the instruction, 'Subtract and write the correct answers.'
- Look at the first question and ask pupils to count backwards from 17 to find the answer. (10)
- Ask pupils to write the answer between the 2 horizontal lines. Emphasize that the 0 in 10 should be written in the ones place, and the 1 in the tens place.
- Repeat for the second question. ($15 - 3 = 12$)
- Ask pupils to complete the other 4 questions themselves.

Additional activities

Activity 3

- Ask pupils to draw a picture of their teachers and talk about their drawings.

Activity 4

- Give pupils Worksheet 85.
- Ask them to complete the sums and write the vertical subtraction sentences in the boxes.

3.7 Policemen



Suggested duration

40 minutes

Objectives

- Add or subtract number sentences to find the correct answer.

Required resources

- flashcards of different number sentences
- Additional:
worksheet to match addition and subtraction sentences

Adding or subtracting number sentences to the correct answer

Activity 1

- Ask pupils to form groups of 4 or 5.
- Show flashcards of addition and subtraction sentences. The first pupil to raise his/her hand and give the correct answer scores a point for his/her group.
- The group with the most points at the end of the activity wins.

Activity 2

- Ask pupils to look at Activity 3.7.
- Read the instruction, 'Add or subtract and match each number sentence to the correct answer.'
- Look at the first sum and guide pupils to count forwards to find the answer for $13 + 3$. (16)
- Ask them to use a pencil and ruler to match $13 + 3$ in the first column to 16 in the second column.
- Repeat for the second question. ($16 - 5 = 11$)
- Ask pupils to match the other 3 number sentences to the correct answers themselves.

Additional activities

Activity 3

- Give pupils Worksheet 86.
- Ask them to first solve and then match the addition and subtraction sentences which give the same answers.

3.8 The Bricklayer



Suggested duration

40 minutes

Objectives

- Complete number sentences.

Required resources

- magnetic cards of '+', '-' signs
- Additional:
worksheet to complete number sentences

Completing number sentences

Activity 1

- Ask pupils to form groups of 4 or 5 and give each group a set of '+' and '-' magnetic cards.
- Write on the board a number sentence that is missing an addition or a subtraction sign.
- A pupil from each group should go to the board and add the correct sign. The first pupil to do so correctly scores a point for his/her team.
- Repeat with other sentences. The team with most points at the end of the activity wins.

Activity 2

- Ask pupils to describe the picture in Activity 3.8.
- Read the instruction, 'Write '+' or '-' to complete the number sentences.'
- Look at the first question, elicit that the + sign is correct, and ask pupils to write it in the blank.
- Repeat for the second and third questions. ($19 - 12 = 7$; $17 + 3 = 20$)
- Ask pupils to complete the rest of the number sentences themselves.

Additional activities

Activity 3

- Ask pupils if they have seen bricklayers. Talk about the work of bricklayers.

Activity 4

- Give pupils Worksheet 87.
- Ask them to add the missing signs or numbers.

Introduction

In this unit pupils learn to use repeated addition to multiply. By the end of this unit pupils should be able to recognize equal groups, use repeated addition to multiply, and recognize equal groups and the related addition sentences.



Pre-assessment activity

- Show pupils 10 oranges and ask them to count them.
- Place the 10 oranges in groups of 2, elicit that there are 5 groups of 2, and count them in 2s.
- Repeat with 2 groups of 5 oranges.
- Repeat, using 18 oranges to form 6 groups of 3.
- Encourage pupils to count in 3s – 3, 6, 9, 12, 15, 18.

4.1 At the bookshop



Suggested duration

40 minutes

Objectives

- Recognize and match equal groups.

Required resources

- sets of different objects
- Additional:
worksheet to tick the groups with the same number of vegetables

Key terms

book

Recognizing and matching equal groups

Activity 1

- Show pupils a set of items, e.g. 7 coloured pencils. Elicit that there are 7 pencils.
- Scatter 7 coloured pencils on a table and elicit that it is also a set of 7 pencils.
- Explain that they are equal groups of 7 coloured pencils and ask pupils to repeat 'equal groups'.
- Repeat the activity with different equal sets of objects.

Activity 2

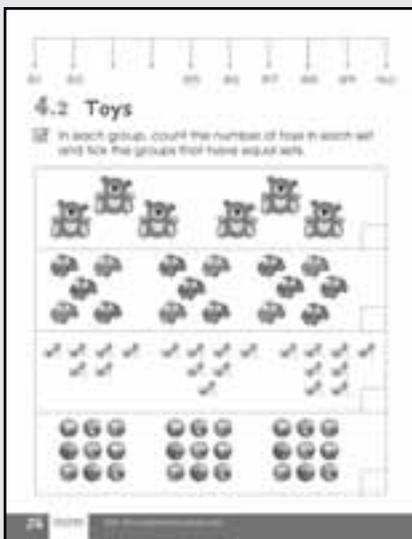
- Ask pupils to look at Activity 4.1.
- Read the instruction, 'Match the groups that have the same number of books.'
- Ask pupils to count the books in the first set in the left column. (3)
- Ask pupils to find a set of books in the right column which has 3 books.
- Ask them to use a ruler and pencil to match the 2 sets of 3 books.
- Repeat for the second set of books. (2)
- Ask pupils to match the sets of 6 books and 10 books themselves.

Additional activities

Activity 3

- Give pupils Worksheet 88.
- Ask them to tick the groups with the same number of vegetables.

4.2 Toys



Suggested duration

40 minutes

Objectives

- Recognize equal groups.

Required resources

- sets of different objects
- Additional:
worksheet to draw equal sets

Key terms

toy

Recognizing equal groups

Activity 1

- Show pupils 2 bundles of e.g. 5 pencils each. Ask them to count the pencils in each set and elicit that they are equal groups.
- Show pupils 2 bundles, one of 6 and one of 7 pencils. Ask them to count the pencils in each bundle and elicit that they are unequal groups; there are more pencils in one group than the other.
- Repeat with more examples of equal and non-equal groups, extending from 2 sets to 3 and 4 sets.
- Ask pupils to look at Activity 4.2.
- Read the instruction, 'In each group, count the number of toys in each set and tick the groups that have equal sets.'

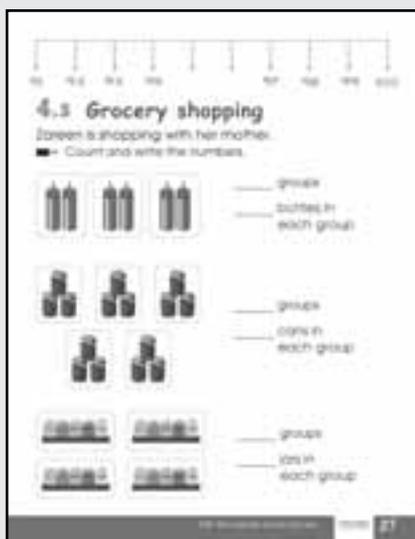
- Ask pupils to look at the first question and elicit that there are 22 sets, and that there are 3 teddy-bears in each set.
- Ask pupils to tick the box because the sets are equal.
- Repeat for the second question. (3 unequal sets of 5, 22 and 6)
- Elicit that the sets are unequal and therefore they should not tick the box.
- Ask pupils to complete the remaining questions themselves. (planes – unequal; marbles – equal)

Additional activities

Activity 33

- Give pupils Worksheet 89.
- Ask them to draw more equal sets.

4.3 Grocery shopping



Suggested duration

40 minutes

Objectives

- Recognize equal groups.

Required resources

- pencils
- rubber bands
- Additional:
drawing paper

Key terms

shopping

Recognizing equal groups

Activity 1

- Place 10 pencils on the table in front of class and ask a pupil to tie them into bundles of 2 pencils each.
- Elicit that there are 5 bundles and 2 pencils in each of them.
- Repeat with 15 pencils and 5 bundles of 3 pencils each, and 3 bundles of 5 pencils each.

Activity 2

- Ask pupils to look at Activity 4.3.
- Read the statement, 'Zareen is shopping with her mother.'

- Read the instruction, 'Count and write the numbers.'
- Ask pupils to look at the first question. Elicit that there are 3 groups, and ask them to write 3 in the first space.
- Elicit that there are 2 bottles in each group and ask them to write 2 in the second space.
- Repeat for the second question. (5 groups of 3)
- Ask pupils to complete the last question themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they go grocery shopping with their parents.
- Get pupils to relate to the class their experiences grocery shopping with their parents. Do they enjoy it? Do they usually buy a lot of groceries?

Activity 4

- This allows for assessment of the pupils' mastery of the learning objectives for the activity.
- Give each pupil a piece of drawing paper.
- Tell pupils to draw a supermarket.
- Instruct pupils to include the following on the supermarket shelves:
 - 5 groups of 2 cans of mushroom soup
 - 3 groups of 3 jars of jam
 - 7 groups of 2 bottles of drink
 - 3 groups of 5 packets of noodles
- Allow pupils to share their drawings with the class.
- Ensure that pupils have drawn correctly.

4.4 At the shoe shop

Suggested duration

40 minutes

Objectives

- Use repeated addition to multiply.

Required resources

- bundles of 3 pens
- Additional: worksheet to practise repeated addition of groups of 3

Key terms

pen
coloured pencil

Using repeated addition to multiply

Activity 1

- Ask a pupil to stand up and elicit that s/he is wearing 1 pair of shoes, or 2 shoes.
- Ask another pupil to stand up.. Elicit that there are now 2 groups of 2 shoes and ask pupils to say '2 groups of 2 shoes'.
- Ask, 'How many shoes are there altogether?' Elicit that 1 group has 2 shoes, and write 2 on the board.
- Elicit that the second group also has 2 shoes, so write +2 on the board and complete the addition sentence $2 + 2 = 4$.
- Ask a third pupil to stand up. Elicit that there are now 3 groups of 2 shoes. Guide pupils to say $2 + 2 + 2$ and write on the board the addition sentence $2 + 2 + 2 = 6$.

Activity 2

- Ask pupils to describe the picture in Activity 4.4.
- Read the instruction, 'Count and fill in the blanks.'
- Read the statements, 'There are 2 groups of shoes.' and 'There are 2 shoes in each group.'
- Elicit that there are 4 shoes altogether and ask pupils to write 4 to complete the addition sentence.
- Read together, 'There are 4 shoes altogether.'
- Repeat for the 3 groups of 2 socks.

Additional activities

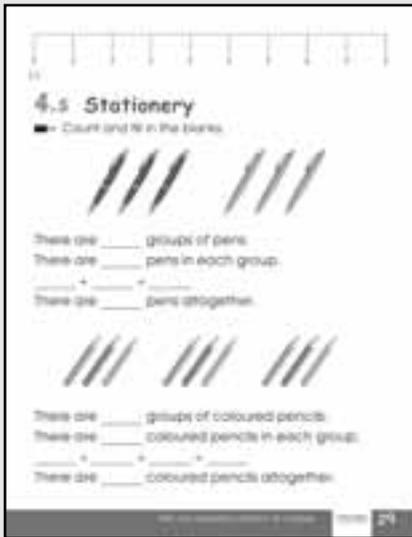
Activity 3

- Ask pupils if they have been to a shoe shop.
- Ask them to share their experiences of shoe shops.

Activity 4

- Give pupils Worksheet 90.
- Ask them to count and fill in the blanks.

4.5 Stationery



Suggested duration

40 minutes

Objectives

- Use repeated addition to multiply.

Required resources

- bundles of 3 pens
- Additional: worksheet to practise repeated addition of groups of 3

Key terms

pen

coloured pencil

Using repeated addition to multiply

Activity 1

- Show a bundle of 3 pens and ask pupils to count the pens. (3)
- Repeat with a second bundle and ask pupils to say '2 groups of 3 pens'.
- To find the total number of pens, guide pupils to form the addition sentence $3 + 3 = 6$
- Add a third bundle of 3 pens and elicit that the addition sentence for the 3 groups is $3 + 3 + 3 = 9$.

Activity 2

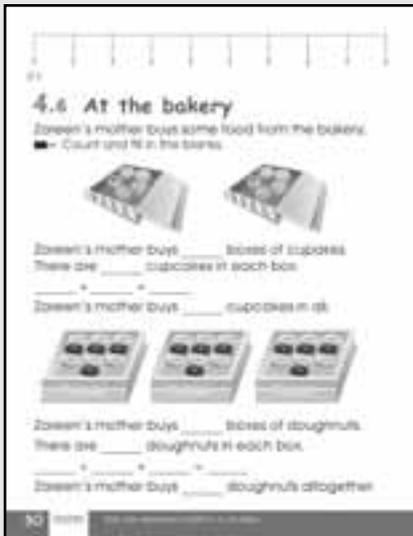
- Ask pupils to look at Activity 4.5.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that there are 2 groups of pens and ask pupils to write 2 in the blank.
- Read together, 'There are 2 groups of pens.'
- Elicit that there are 3 pens in each group. Ask pupils to write 3 in the blank and read together, 'There are 3 pens in each group.'
- Repeat for the 3 groups of 3 coloured pencils. ($3 + 3 + 3 = 9$)

Additional activities

Activity 3

- Give pupils Worksheet 91.
- Ask them to count and fill in the blanks.

4.6 At the bakery



Suggested duration

40 minutes

Objectives

- Use repeated addition to multiply.

Required resources

- bundles of 5 and 10 pens
- Additional:
worksheet to practise repeated addition for groups of 5 and 10

Key terms

bakery

cupcake

doughnut

Activity 1

- Use 2 and 3 bundles of 5 pens as in Activity 1 Unit 4.5, to illustrate the addition sentences $5 + 5 = 10$, and $5 + 5 + 5 = 15$.
- In the same way use 3 bundles of 10 pens to illustrate the addition sentence $10 + 10 + 10 = 30$.

Activity 2

- Ask pupils to look at Activity 4.6.
- Read the statement, 'Zareen's mother buys some food from the bakery.'
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils, 'How many boxes of cupcakes are there?' Pupils should count 2. Tell pupils to write '2' in the blank and read together with pupils, 'Zareen's mother buys 2 boxes of cupcakes.'
- Look at the first question and elicit that there are 2 boxes of cupcakes and 5 cakes in each box.
- Guide pupils to write the addition sentence $5 + 5 = 10$ to find out how many cakes there are altogether.
- Ask pupils to write 10 to conclude the sentence and read together, 'Zareen's mother buys 10 cupcakes in all.'
- Repeat for the second question. (3 boxes of 10 doughnuts; $10 + 10 + 10 = 30$)

Additional activities

Activity 3

- Ask pupils if they like to go to bakeries.
- Ask what they usually buy at bakeries and which bakeries they like.

Activity 4

- Give pupils Worksheet 92.
- Ask them to count and fill in the blanks.

4.7 Sweets



Suggested duration

40 minutes

Objectives

- Use repeated addition to multiply.

Required resources

- packets of 2, 3, 5 and 10 sweets
- Additional:
worksheet to practise repeated addition of groups of 2, 3, 5 and 10

Using repeated addition to multiply

Activity 1

- Ask pupils to work in groups of 4. Each group should take a space in front of the board and send 1 pupil from the group to answer the first question.
- Show 2 packets of 2 sweets and ask pupils to write the addition sentence to show how many sweets there are altogether. The pupils who write $2 + 2 = 4$ score a point for their team.
- Repeat with 3 packets of 3 sweets, 3 packets of 5 sweets, 5 packets of 10 sweets, etc.
- The team with the most points at the end of the activity wins.

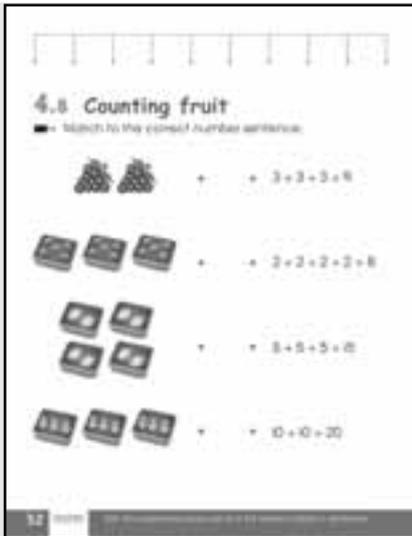
Activity 2

- Ask pupils to look at Activity 4.7.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that there are 3 groups of lollipops, and 2 lollipops in each group.
- Read the question, 'How many lollipops are there altogether?' Guide pupils to write the addition sentence $2 + 2 + 2 = 6$.
- Repeat for the candy canes, (2 groups of 5; $5 + 5 = 10$) and the sweets. (3 groups of 10; $10 + 10 + 10 = 30$)

Activity 3

- Give pupils Worksheet 93.
- Ask them to count and fill in the blanks.

4.8 Counting fruit



Suggested duration

40 minutes

Objectives

- Recognize equal groups and the related addition sentence.

Required resources

- flashcards of groups of fruits
- Additional:
worksheet to look at the addition sentence and draw more

Activity 1

- Ask pupils to work in groups of 5. Ask 1 pupil from each group to come to the board.
- Show these pupils a flashcard of groups of fruits, and ask them to write the addition sentence on the board.
- The first pupil to write the correct addition sentence scores a point for the team.
- Repeat the activity so that every pupil gets a turn at the activity.
- The team with the most points at the end of the activity wins.

Activity 2

- Ask pupils to look at Activity 4.8.
- Read the instruction, 'Match to the correct number sentence.'
- Look at the first question and elicit that there are 2 bunches of 10 grapes.
- Guide pupils to match the bunches of grapes to the sentence $10 + 10 = 20$ using a pencil and ruler.
- Repeat with the second question. ($5 + 5 + 5 = 15$)
- Ask pupils to match the other 2 groups of fruits themselves.

Addition activities

Activity 3

- Give pupils Worksheet 94.
- Ask them to draw more equal groups of fruits and complete the addition sentence.

Introduction

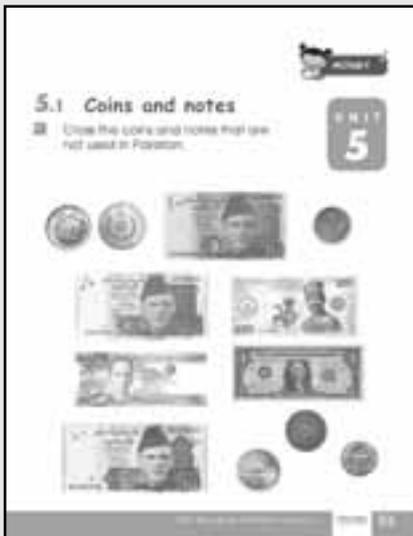
In this unit pupils are introduced to the Pakistani rupee. By the end of this unit pupils should be able to recognize Pakistani currency, add the value of coins and notes, match prices with the correct amounts of money, compare prices, and calculate the total amount of money spent and the amount of money left.



Pre-assessment activity

- Show the pupils Pakistani coins and notes and gradually introduce them to the different denominations. Pass the coins/notes around the class and ask pupils to describe them and differentiate between them.
- Point to each coin and note and ask pupils to identify them.
- Explain that the sign for the Pakistani rupee is 'Rs'.

5.1 Coins and notes



Suggested duration

40 minutes

Objectives

- Recognize Pakistani currency.

Required resources

- Pakistani currency of different denominations
- coins and notes of other countries
- Additional: worksheet to match the coins and notes to the correct values

Key terms

coin
note
Pakistan

Recognizing Pakistani currency

Activity 1

- Place some coins and notes on the table. Pick them up one by one and ask pupils to tell you their value.

- Point out the main features of the Pakistan currency: banknotes feature a portrait of the Quaid-e-Azam on the obverse with varying designs on the reverse, the watermark, and the predominant colour of each of the banknotes.
- Show currencies of other countries so pupils can distinguish between their own currency and those of other countries.

Activity 2

- Ask pupils to look at Activity 5.1.
- Read the instruction, 'Cross the coins and notes that are not used in Pakistan.'
- Look at each coin/note in turn and cross out those not used in Pakistan.

Additional activities

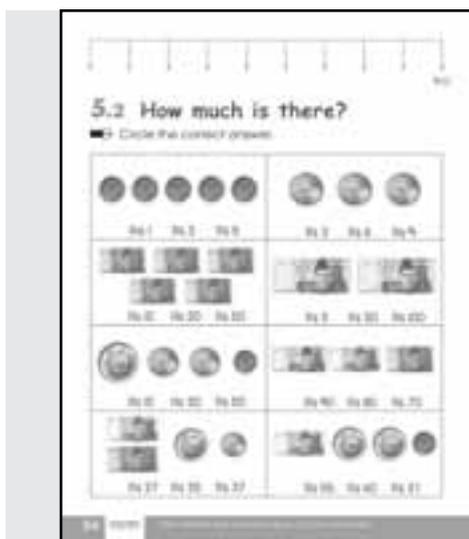
Activity 3

- Ask pupils if they have any Pakistani coins or notes in their wallets.
- Ask them to show their coins/notes and identify their values.

Activity 4

- Give pupils Worksheet 95.
- Ask them to draw a line to match each coin on the left to the correct value on the right.

5.2 How much is there?



Suggested duration

40 minutes

Objectives

- Identify and add the values of coins and notes.

Required resources

- Pakistani currency of different denominations
- Additional:
worksheet to write the amount of money

Identifying and adding the values of coins and notes

Activity 1

- Show Pakistani coins and notes of different denominations and ask pupils to tell you the value.
- Show e.g. five Rs 2 coins one-by-one and help students to count in 2s to find their value.
- Repeat with e.g. three Rs 10 notes.

- Repeat the activity with different numbers of different denominations of coins and notes and ask pupils to tell you the total amounts of money.

Activity 2

- Ask pupils to look at Activity 5.2.
- Read the instruction, 'Circle the correct answer.'
- Look at the first set of coins. Elicit that there are five 1 rupee coins and the total value is Rs 5.
- Ask pupils to circle Rs 5.
- Repeat for the second question, (Rs 6) and the third question. (Rs 50)
- Ask pupils to complete the remaining questions themselves.

Additional activities

Activity 33

- Give pupils Worksheet 96.
- Ask them to count and write the total amounts.

5.3 At the market



Suggested duration

1 hour

Objectives

- Match prices with the correct amounts of money.

Required resources

- real coins and notes
- flashcards of items with price tags
- Additional:
drawing paper magazine pictures
glue scissors
coins and notes

Key terms

market

Matching prices with the correct amounts of money

Activity 1

- Place some groups of coins and notes on tables around the classroom.
- Ask pupils to work in groups of 4 or 5 and give each group a flashcard of items with price tags.

- Pupils should move round the room and find the amounts of money that match the prices shown on their flashcard.
- When a group finds the correct amount of money, they call the teacher and 'sells' the teacher the items.

Activity 2

- Ask pupils to look at Activity 5.3.
- Read the statement, 'Sania's mother goes to the market to buy some fruit.'
- Read the instruction, 'Match the fruit to the correct amount of money needed.'
- Look at the bag of oranges and elicit that it costs Rs 15.
- Ask pupils to identify the set of notes and/or coins in the second column that has the same value. (the second set of money)
- Ask them to use a ruler and pencil to match the oranges to the correct amount of money.
- Repeat for the mangoes. (fourth set of money)
- Help pupils to complete the remaining questions.

Additional activities

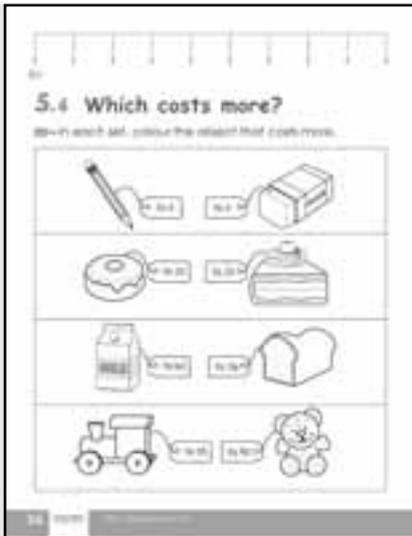
Activity 3

- Ask pupils to raise their hands if they go to the market with their parents to buy fruit.
- Encourage the pupils to count the amount of money needed and give it to their parents to check each time they buy fruit at the market.

Activity 4

- Give each pupil a sheet of drawing paper and some pages of a magazine.
- Ask them to draw and decorate their own stall. and choose pictures from the magazines of items they would like to sell in their stall.
- They should cut out magazine pictures of items they would like to sell, glue them on their stall, and give each a price tag of less than Rs 100.
- Give pupils real or imitation coins and notes and allow them to buy things from each other's stalls.

5.4 Which costs more?



Suggested duration

40 minutes

Objectives

- Compare prices.

Required resources

- items with price tags
- Additional:
items with different price tags

Compare prices

Activity 1

- Show pupils various items that have price tags and help them to compare the prices. For example, show a book that costs Rs 30 and a book that costs Rs 50. Ask which book costs more.
- Give one pupil a priced item, e.g. a toy plane with the price tag of Rs 90. Give a second pupil the same plane with a price of Rs 100. Elicit that it would not be sensible to buy the item that costs more.
- Repeat the activity with different pairs of items and price tags; encourage pupils to explain that they would not buy an item if 'it costs more.'

Activity 2

- Ask pupils to look at Activity 5.4.
- Read the instruction, 'In each set, colour the object that costs more.'
- Look at the first question and elicit that the pencil costs more. Ask the pupils to colour the pencil.
- Repeat for the second question and elicit that they should colour the cake.
- Guide pupils to complete the remaining questions.

Additional activities

Activity 3

- Set up 'stalls' around the classroom and place objects with different price tags on them.
- Pupils should move around the class and buy things from the stalls.
- Gather the pupils, ask them to show what they have bought, and discuss which items cost more.
- Encourage pupils to find classmates who bought things that cost more than those they bought themselves.

5.5 What can Sania buy?

5.5 What can Sania buy?

Compare the money Sania has to the prices of things she wants to buy.

Colour the object Sania can buy with the money shown.

 Rs 20	 Rs 5	 Rs 5	 Rs 20
 Rs 10	 Rs 10	 Rs 10	 Rs 20
 Rs 10	 Rs 10	 Rs 10	 Rs 10

Suggested duration

40 minutes

Objectives

- Compare prices with amounts of money.

Required resources

- flashcards of different objects with price tags
- Additional:
worksheet to write the prices

Comparing prices with amounts of money

Activity 1

- Place some money on the table, ask pupils to count it, and explain it is all the money you have.
- Show them flashcards of different objects with price tags and ask them to say which items you could buy. Pupils should compare the prices with the amount of money you have.
- Repeat the activity by varying the amount of money that you have.

Activity 2

- Ask pupils to look at Activity 5.5.
- Read the statement, 'Compare the money Sania has to the prices of things she wants to buy.'
- Read the instruction, 'Colour the object Sania can buy with the money shown.'
- Look at the first question and elicit that Sania has Rs 7 .
- Elicit that some things cost more than Rs 7 but that Sania can buy the pencil. Ask pupils to colour the pencil.
- Repeat for the second question, (comb) and the third question. (ball)

Additional activities

Activity 3

- Give pupils Worksheet 97.
- Ask them to count the amounts of money and write the price on each label.

5.6 Snacks

5.6 Snacks

■ Add the prices and fill in the blanks.

Rs 20 + Rs 8 = Rs ____
The sausage bun and the apple cost Rs ____ altogether.

Rs 22 + Rs 28 = Rs ____
The cupcake and the doughnut cost Rs ____ altogether.

Rs 35 + Rs 30 = Rs ____
The sandwich and the slice of chocolate cake cost Rs ____ altogether.

Suggested duration

40 minutes

Objectives

- Add prices in rupees.

Required resources

- different items with price tags

Key terms

sausage bun apple cupcake doughnut sandwich chocolate cake

Adding prices in rupees

Activity 1

- Bring priced items to class and ask pupils to look at them.
- Hold up 2 items, e.g. a book that costs Rs 30 and a ruler that costs Rs 5, and ask how much they cost altogether.
- Write on the board the addition sentence $\text{Rs } 30 + \text{Rs } 5 =$ and elicit that the total is Rs 35.
- Repeat with other pairs of items and ask students to write the addition sentences on the board.
- Invite students to select the items and ask, 'How much do they cost altogether?'

Activity 2

- Ask pupils to look at Activity 5.6.
- Read the instruction, 'Add the prices and fill in the blanks.'
- Look at the first question and elicit that the sausage bun and the apple cost Rs 30 altogether.
- Ask pupils to write 30 in the blanks and read together, 'The sausage bun and the apple cost Rs 30 altogether.'
- Ask pupils to complete the other questions themselves.
- Check that the pupils have completed the activity correctly.

Additional activities

Activity 3

- Ask pupils what their favourite snacks are.
- Encourage pupils to count the total cost of 2 of their favorite snacks each time they buy them.

Activity 4

- Divide pupils into groups of 5 or 6 and give each group a value, e.g. pupils in one group represent 1 rupee each, the second group represent 2 rupees each, the third group represents 5 rupees each, the fourth group represents 10 rupees each, and the fifth group 20 rupees each.
- Call out a value and pupils should group themselves to get the correct amount and then sit down.
- For example, call out Rs 20. Pupils in the fifth group can all sit down since they already represent Rs 20, while pupils in the fourth group can each find partners and sit down. Pupils who represent 5 rupees can form a group of 4, or pupils with 5 rupees can find another of 5 rupees and 5 pupils of 2 rupees and so on.
- The pupils who cannot form groups and are left standing are out of the game.
- The game continues until no amount can be formed from the pupils remaining.

5.7 Mothers' Day



Suggested duration

40 minutes

Objectives

- Calculate the total amount of money spent.

Required resources

- items with price tags
- Additional: worksheet to circle the coins needed

Key terms

presents Mothers' Day pastry wallet bouquet lipstick

Calculating the total amount of money spent

Activity 1

- Set up 'stalls' around the classroom and place objects with different price tags on them.
- Pupils should role-play customers and buy things from these stalls.
- Tell pupils that it is Mothers' Day and they can choose 2 gifts for their mothers and bring them to you, the seller.
- Ask each pupil to calculate how much they will spend altogether.

Activity 2

- Ask pupils to look at Activity 5.7.
- Read the statement, 'Sidra and Farhan bought presents for their mothers for Mother's Day.'
- Read the instruction, 'Add to fill in the blanks.'

- Read the sentence, 'Sidra bought a pastry and a waett.'
- Ask the pupils to look at the price tags of these items and count on from Rs 63 to Rs 83 to find out how much she spent altogether.
- Ask them to write 83 in the blanks and read together, 'Sidra spent Rs 83 altogether.'
- Repeat for the second question. (Rs 100)

Additional activities

Activity 3

- Ask pupils to say what they bought for their mothers on Mothers' Day.
- How did their mothers react when they received the gift. Were they very happy?

Activity 4

- Give pupils Worksheet 98.
- Ask them to circle the coins they need to spend.

5.8 Fathers' Day

Suggested duration

40 minutes

Objectives

- Calculate the amount of money left.

Required resources

- different items with price tags
- Additional:
worksheet to count the amount of money left

Key terms

present Fathers' Day tie shirt

Calculating the amount of money left

Activity 1

- Tell pupils, e.g. 'I have Rs 100.' Write the amount of money on the board.
- Show objects with different price tags, e.g. a belt which costs Rs 50.
- Ask 'If I buy this belt, how much money will I have left?'
- Help pupils to work out that you 'will have Rs 50 left'.
- Repeat with another item, e.g. a scarf which costs Rs 85. (You will have Rs 15 left.)
- Repeat with different objects and prices and different initial sums of money.

Activity 2

- Ask pupils to look at Activity 5.8.
- Read the statement, 'Nadir and Sania bought presents for their fathers for Father's Day.'
- Read the instruction, 'Subtract to fill in the blanks.' and the sentence, 'Nadir has Rs 85. He buys a tie for Rs 60.'
- Teach pupils how to subtract Rs 60 from Rs 85 by grouping into tens and ones. (Rs 25 left)
- Ask them to write 25 in the blanks and read together, 'Nadir has Rs 25 left.'
- Repeat for the second question. (Rs 5 left)

Additional activities

Activity 3

- Ask pupils what they bought for their fathers on Fathers' Day.
- Do they buy the same or different things for their mothers and fathers?

Activity 4

- Give pupils Worksheet 99.
- Ask them to circle the coins they need to buy the pair of gloves and count the amount left.

Introduction

In this unit pupils look back at the concepts they learned in the previous five units. By the end of the unit, pupils should be able to complete activities related to these concepts with accuracy and confidence.

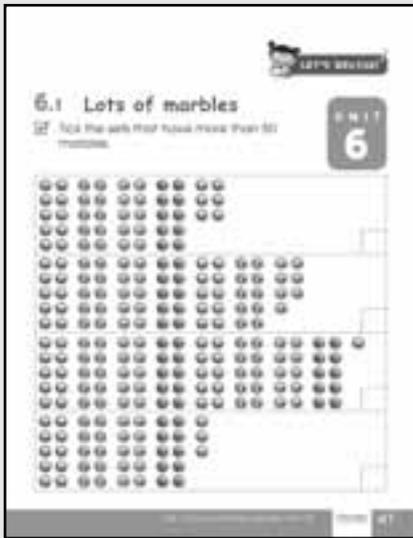


Pre-assessment activity

- Recall and revise the concepts learned in the previous 5 units: writing number sentences for addition and subtraction; telling the time; comparing mass using non-standard units of measurement; counting from 1 to 100; counting in 2s, 5s, and 10s; horizontal and vertical addition and subtraction; equal groups and using repeated addition to multiply; and money.



6.1 Lots of marbles



Suggested duration

40 minutes

Objectives

- Count quantities greater than 50.

Required resources

- pencils
- rubber bands
- Additional:
worksheet to count the number in each set

Key terms

marble

Counting quantities greater than 50

Activity 1

- Prepare 35 pencils. Ask 3 pupils to take 10 pencils each and tie them together using a rubber band.
- Elicit that there are 3 sets of 10 and 5 extra pencils not tied in a set of 10.
- Ask the pupils to count in 10s by asking the first pupil to say 10, the second to say 20, and the third to say 30. Count on the extra 5 to find the total number of pencils.
- Repeat the activity with different numbers of pencils.

Activity 2

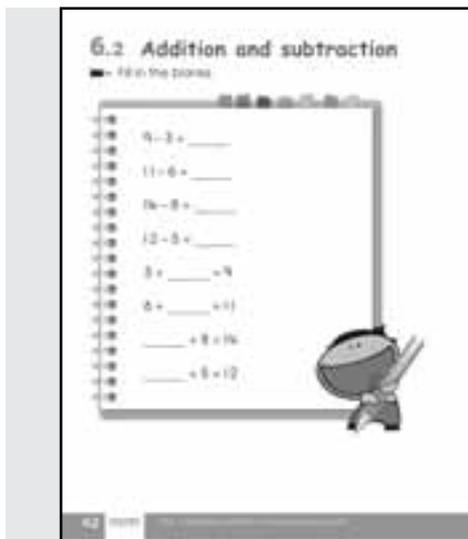
- Ask pupils to look at Activity 6.1.
- Read the instruction, 'Tick the sets that have more than 50 marbles.'
- Look at the first question and ask pupils to count the marbles in one group. (100)
- Point out that 1 group of marbles represents 10 and guide pupils to count in 10s, (40)
- Count on in ones to find the total. (46)
- Elicit that there are fewer than 50 marbles.
- Work through the second question in the same way to elicit that there are 67 marbles
- Establish that there are more than 50 marbles and ask pupils to tick the box.
- In the same way, guide pupils to tick the third set of marbles but not the fourth set.

Additional activities

Activity 3

- Give pupils Worksheet 100.
- Ask them to circle groups of 10s and count in tens and ones to find the total numbers.

6.2 Addition and subtraction



Suggested duration

40 minutes

Objectives

- Complete addition and subtraction sums.

Required resources

- building blocks
- Additional: worksheet to add and subtract

Completing addition and subtraction sums

Activity 1

- Show pupils 4 building blocks and then another 2 and ask how many blocks there are altogether.
- Write on the board the addition sentence $4 + 2 = 6$.
- Ask how many remain if 2 are removed. Remove the blocks and elicit that 4 remain.
- Write on the board the subtraction sentence $6 - 2 = 4$.

- Repeat, removing 4 of the blocks so that 2 remain. Write on the board the subtraction sentence $6 - 4 = 2$.
- Repeat the activity with other numbers of blocks, e.g. $8 + 2 = 10$; $10 - 8 = 2$; $10 - 2 = 8$.

Activity 2

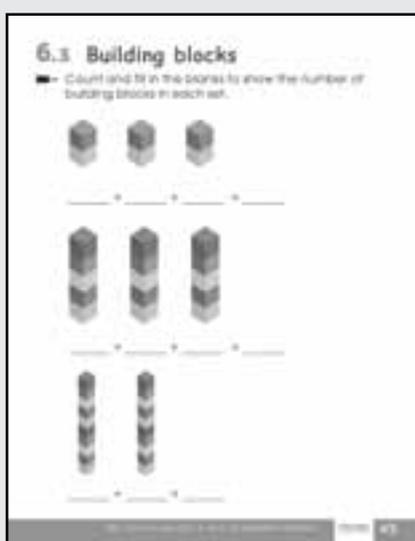
- Ask pupils to look at Activity 6.2.
- Read the instruction, 'Fill in the blanks.'
- Look at the first question and ask pupils to count backwards from 9 to 3.
- Ask them to write 6 in the first blank.
- Repeat for the second question. ($11 - 6 = 5$)
- Ask pupils to complete the rest of the subtraction sentences.
- Look at the first addition question and elicit that 6 must be added to 3 to make 9. Ask pupils to write 6 in the blank.
- Repeat for the next question. ($6 + 5 = 11$)
- Ask pupils to complete the other 2 addition sentences themselves.
- Elicit that the answers to the first 4 questions are the same as the answers to the last 4 questions.

Additional activities

Activity 3

- Give pupils Worksheet 101.
- Ask them to add and subtract and to fill in the blanks.

6.3 Building blocks



Suggested duration

40 minutes

Objectives

- Count in sets of 2, 5, and 10.
- Complete repeated addition sums.

Required resources

- building blocks
- Additional:
worksheet to count by repeated addition

Key terms

building block

Counting in sets of 2, 5, and 10; repeated addition

Activity 1

- Show pupils 4 sets of 2 building blocks and ask them to find the total number by counting in 2s.
- Write on the board the addition sentence $2 + 2 + 2 + 2 = 8$.
- Repeat with 4 sets of 5 blocks. Encourage pupils to count in 5s to find the total number.
- Write on the board the addition sentence $5 + 5 + 5 + 5 = 20$.
- Repeat with 4 sets of 10 blocks and the sentence $10 + 10 + 10 + 10 = 40$.

Activity 2

- Ask pupils to look at Activity 6.3.
- Read the instruction, 'Count and fill in the blanks to show the number of building blocks in each set.'
- Look at the first question and elicit that there are 3 groups of 2 blocks.
- Ask pupils to write 2 in each of the 3 blanks and count in 2s to find the total. (6)
- Repeat for the other sets of blocks.

Additional activities

Activity 3

- Give pupils Worksheet 102.
- Ask them to fill in the blanks.

6.4 Enough money

6.4 Enough money

Circle the money Amir needs to buy a drink and a pen.

He has Amir's money.

Amir buys a drink for 5p.
He pays 7p for a pen.
Amir spends 5p + 7p = 12p altogether.
Amir had 10p.
He is left with 10p - 12p = 2p.

Suggested duration

40 minutes

Objectives

- Count money and calculate change.

Required resources

- real or printed coins and notes
- Additional: worksheets to count who has the most money left

Key terms

drink pen

Counting money and calculating change

Activity 1

- Give pupils some real or printed coins and notes to role-play buying and selling and ask them to buy items from their classmates' pencil cases or bags.
- Pupils should ask each other politely, e.g. 'How much is your pencil case?'
- Both buyer and seller should count the money to check it is the correct amount.
- The buyer should then count how much money he/she has left.

Activity 2

- Ask pupils to look at Activity 6.4.
- Read the instruction, 'Circle the money Amir needs to buy a drink and a pen.'
- Elicit that the drink costs Rs 40.
- Guide pupils to circle a combination of money to make Rs 40; e.g. two Rs 20 notes, one Rs 20 note and two Rs 10 notes, etc.
- Repeat for the pen.
- Read the instruction, 'Count Amir's money and fill in the blanks.'
- Ask pupils to write the prices for the drink and the pen in the first two blanks.
- Guide pupils to write the addition sentence $\text{Rs } 40 + \text{Rs } 15 = \text{Rs } 55$ to find out how much he spent altogether.
- Ask pupils to count the amount of money Amir had initially. (Rs 87)
- Ask pupils to write Rs 87 in the second to last blank.
- Guide pupils to write the subtraction sentence $\text{Rs } 87 - \text{Rs } 55 = \text{Rs } 32$ to find how much he has left.

Additional activities

Activity 3

- Give pupils Worksheet 103.
- Ask them to circle the child with the most amount of money left.

Worksheet 1

Match the numbers to the number words.

18

twenty

13

twelve

14

thirteen

17

sixteen

16

nineteen

11

eighteen

19

eleven

15

fourteen

20

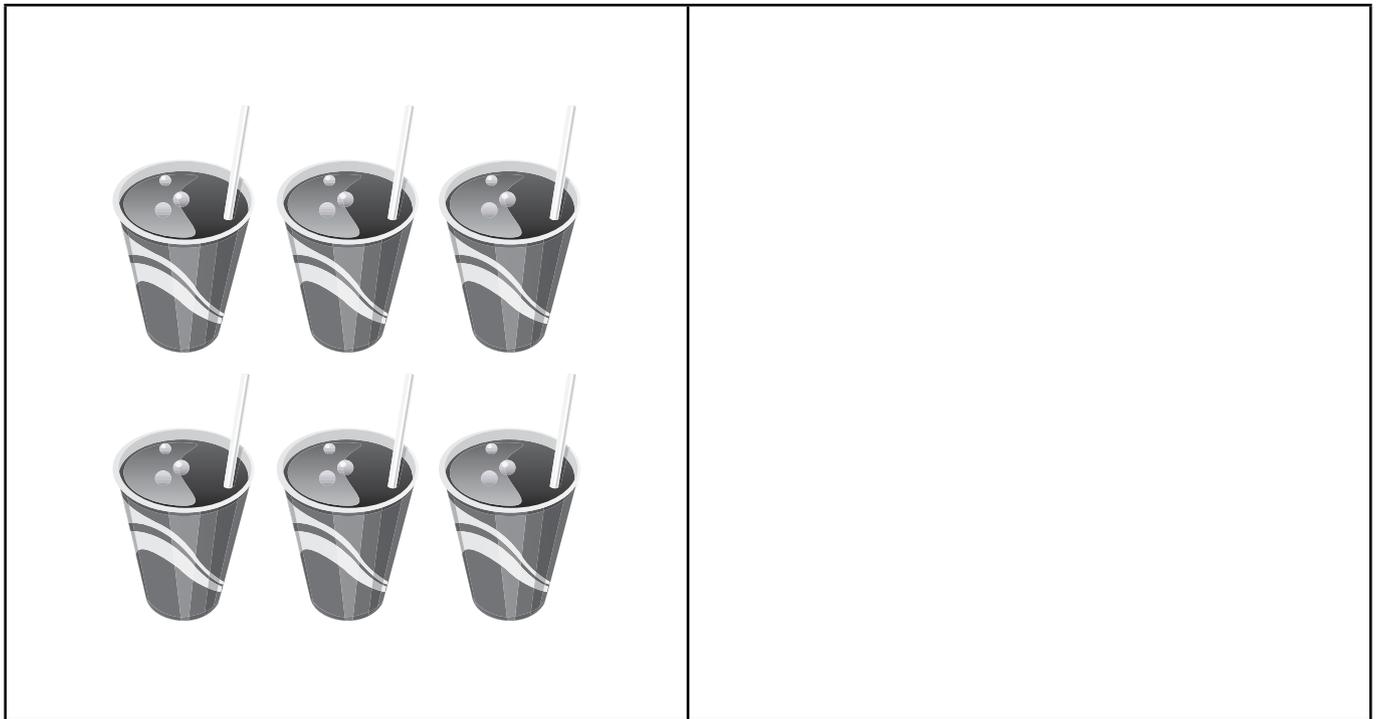
seventeen

12

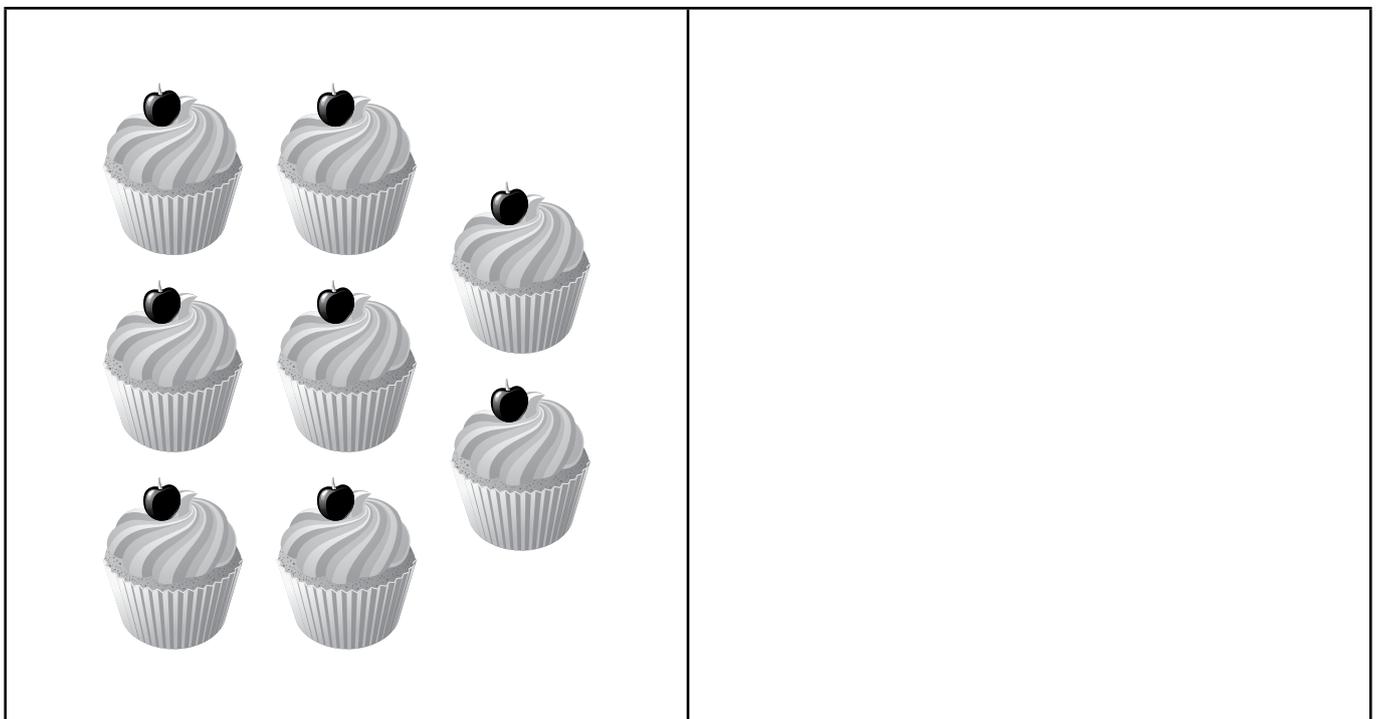
fifteen

Worksheet 2

Draw a set that has more.

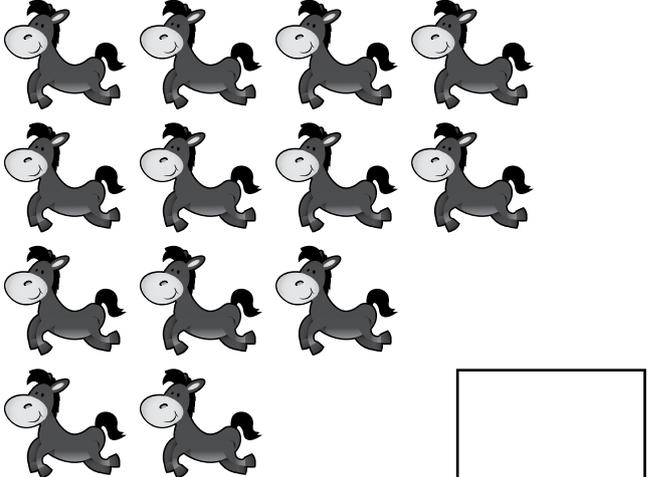
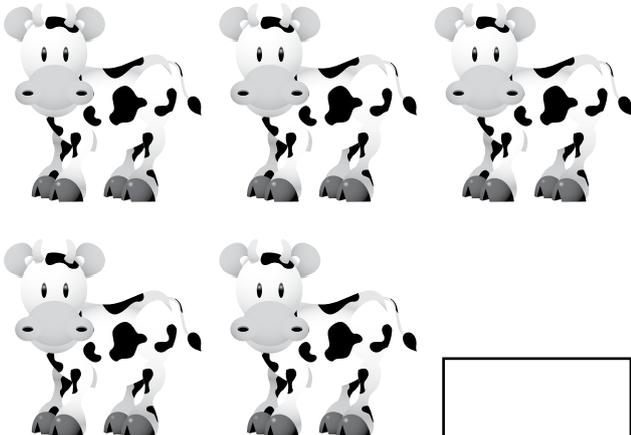
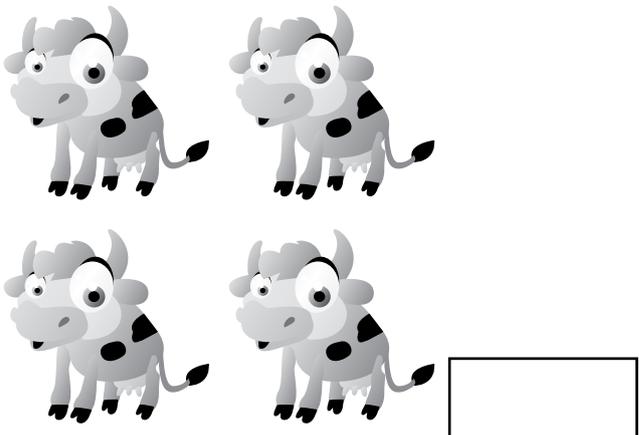
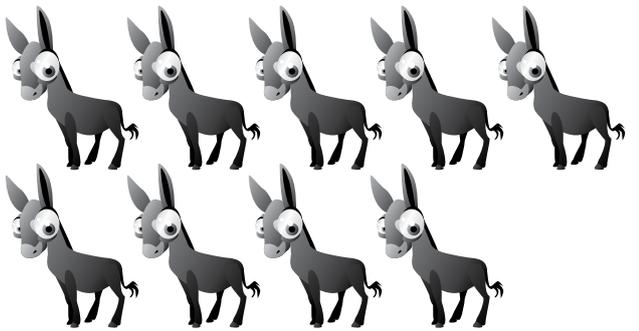


Draw a set that has fewer.



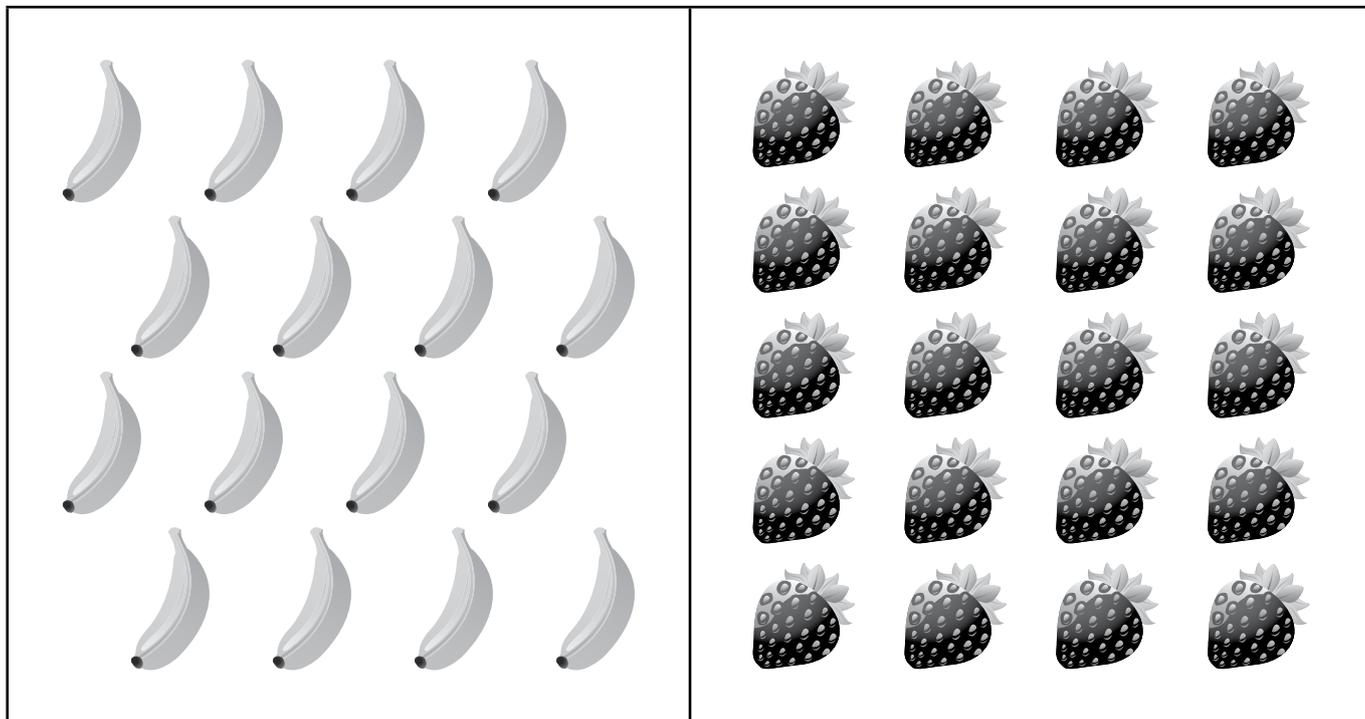
Worksheet 3

Tick (✓) the sets with 9 or fewer animals.

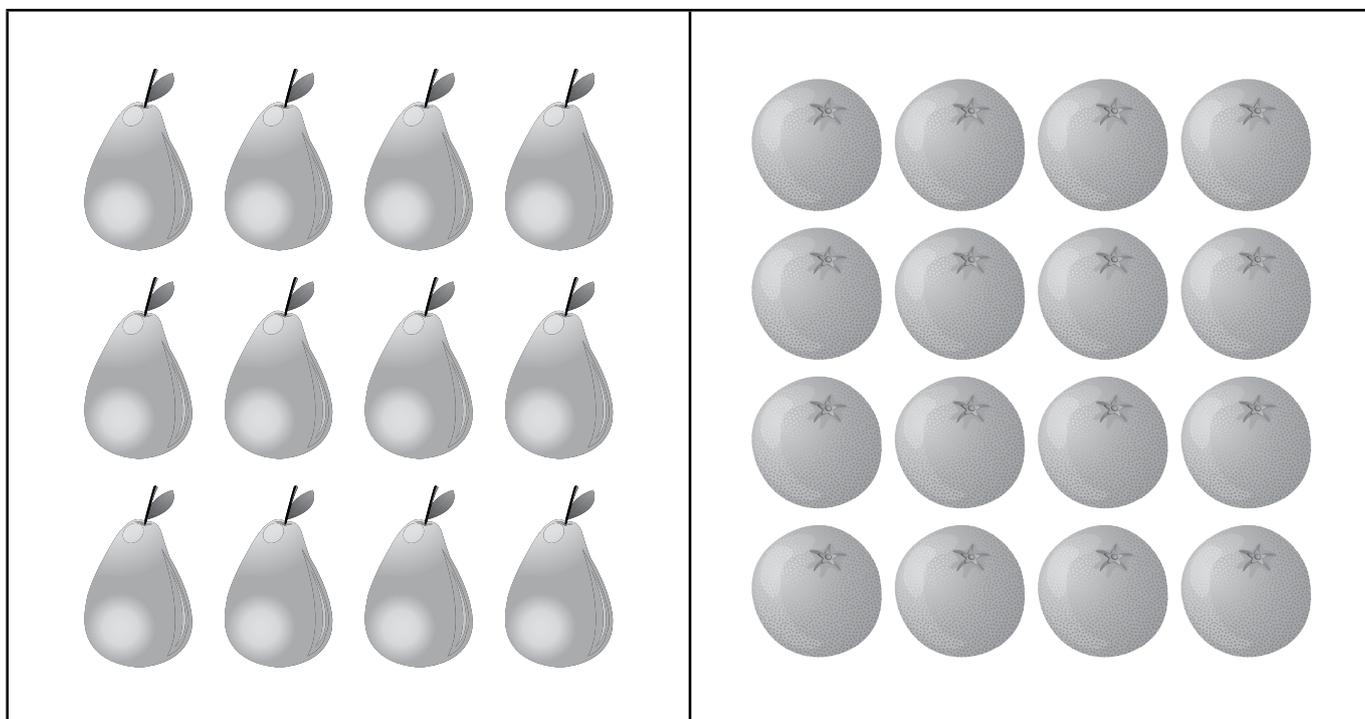
 <input type="checkbox"/>	 <input type="checkbox"/>
 <input type="checkbox"/>	 <input type="checkbox"/>
 <input type="checkbox"/>	 <input type="checkbox"/>

Worksheet 4

Circle the set that has more.

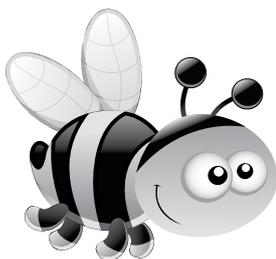
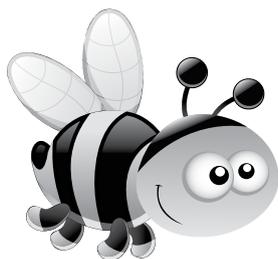


Circle the set that has fewer.

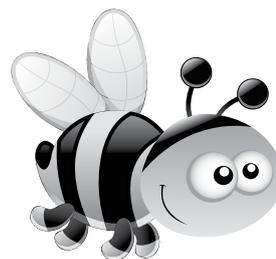


Worksheet 5

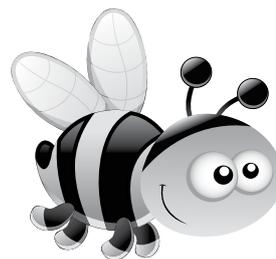
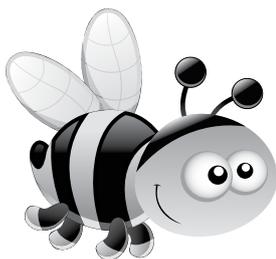
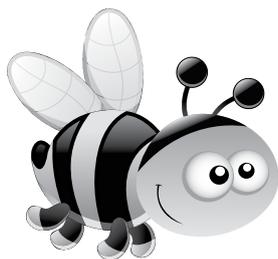
Count and write the total.



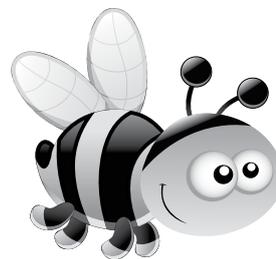
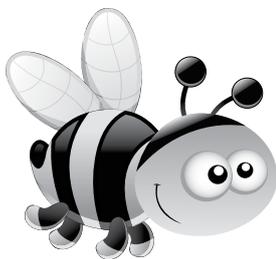
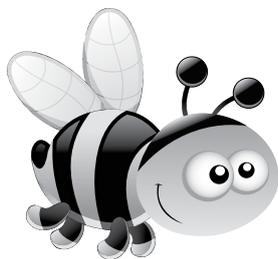
and



_____ bees altogether.



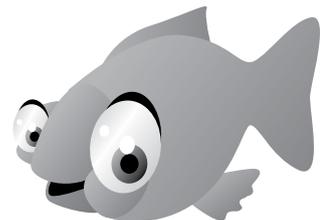
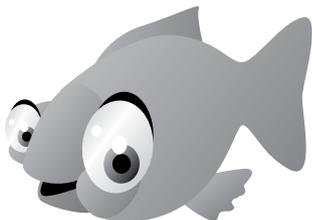
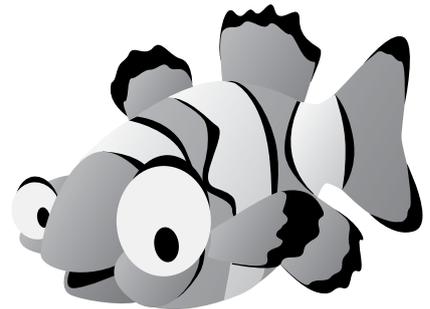
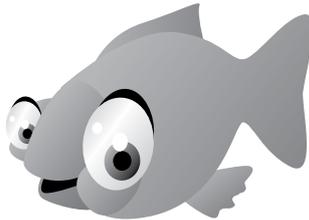
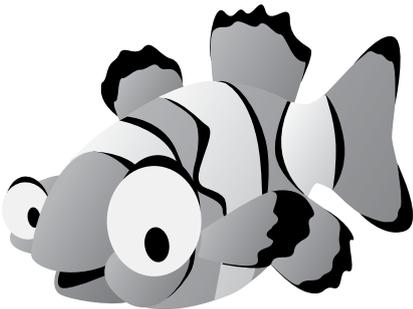
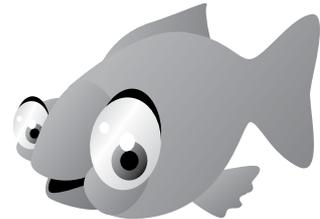
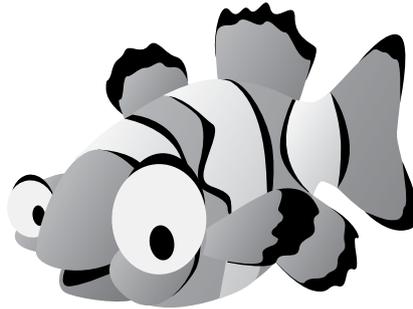
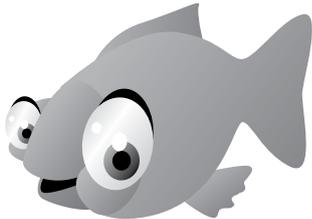
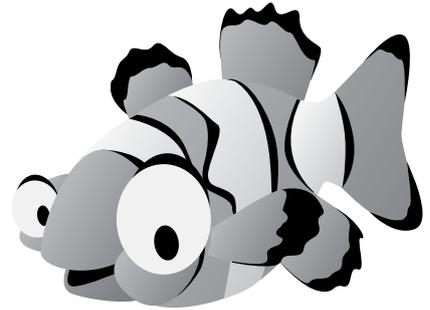
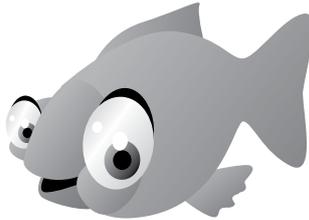
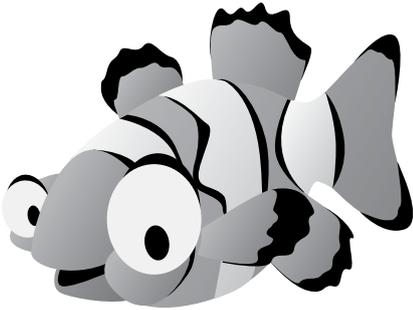
and



_____ bees altogether.

Worksheet 6

Write the addition sentence. Count how many fish are there altogether.

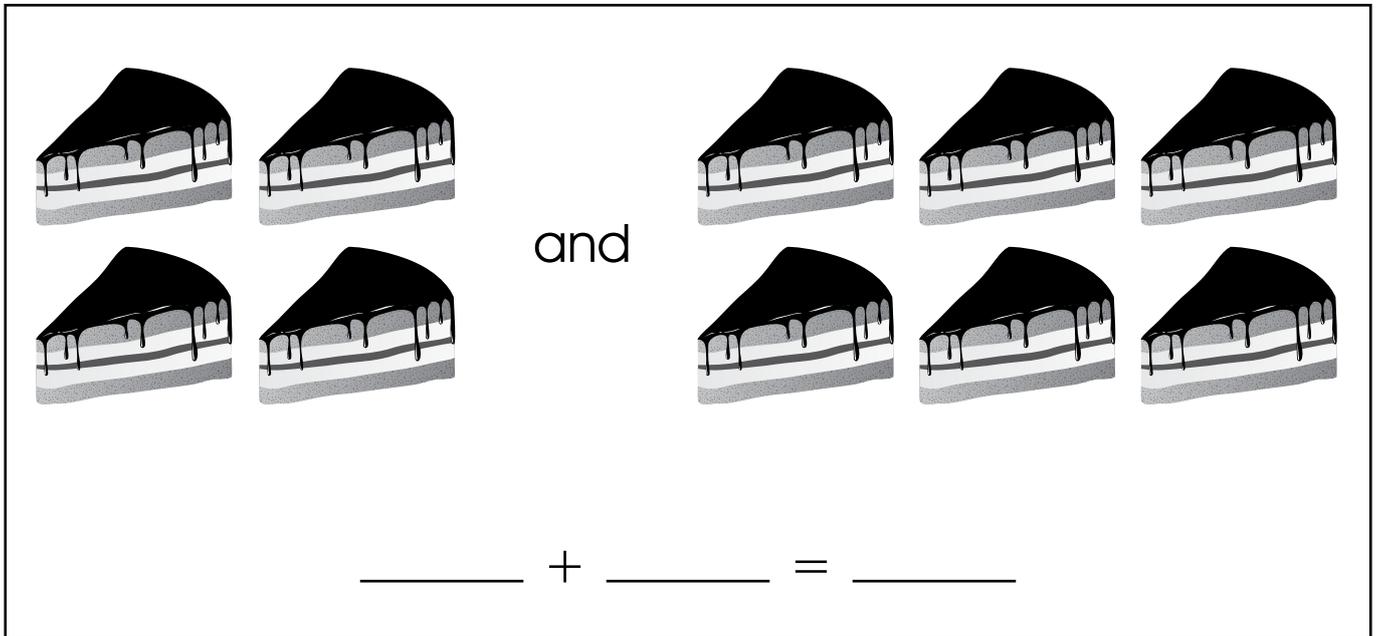


_____ + _____

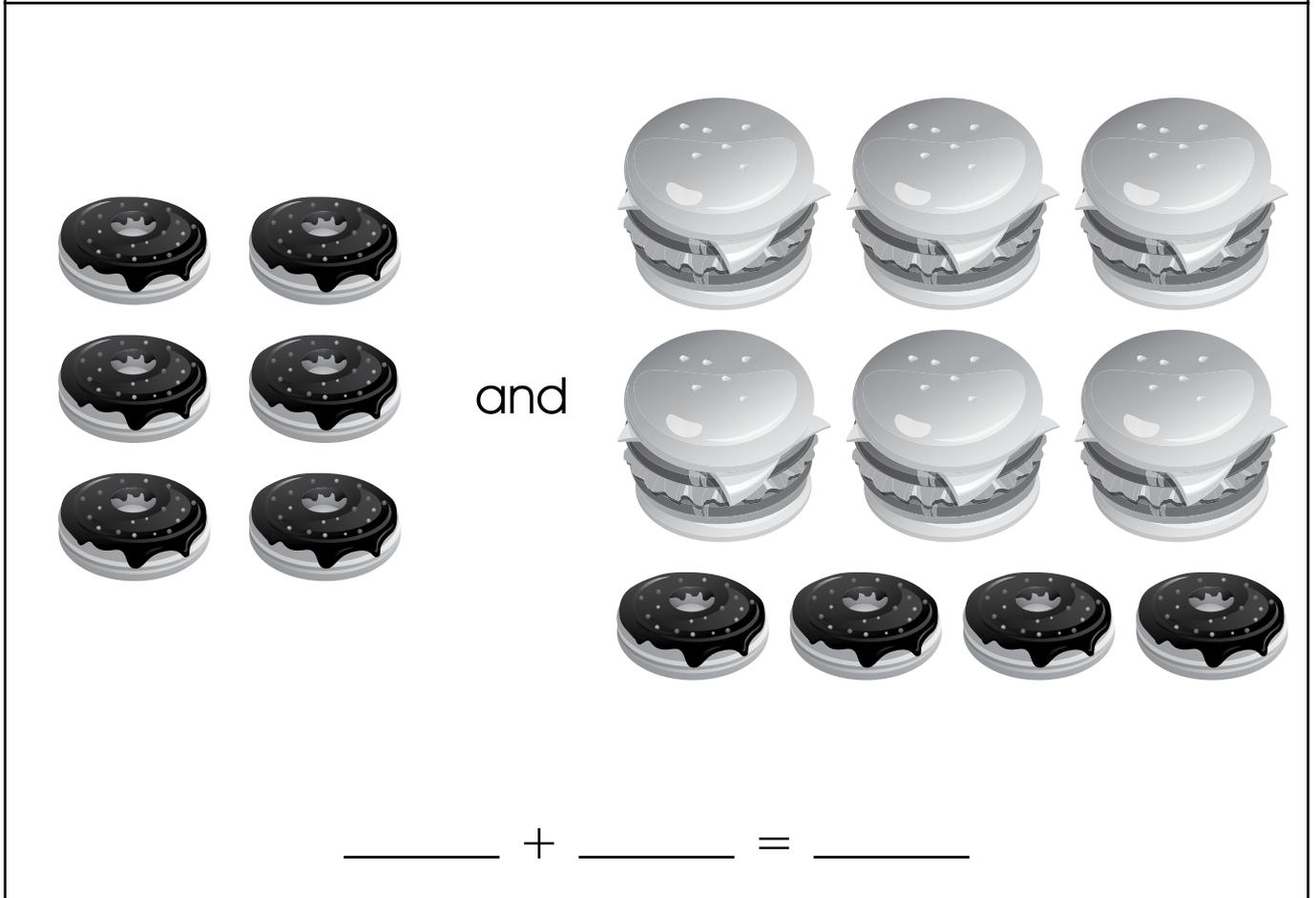
There are _____ fish altogether.

Worksheet 7

Write the addition sentence.



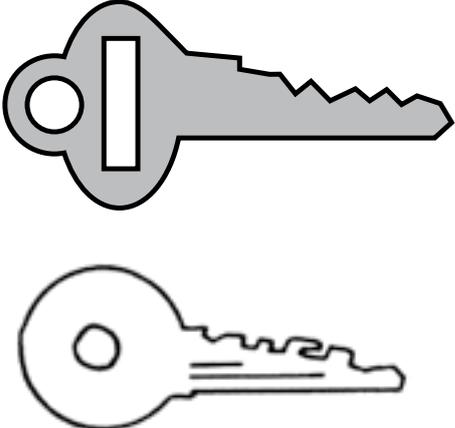
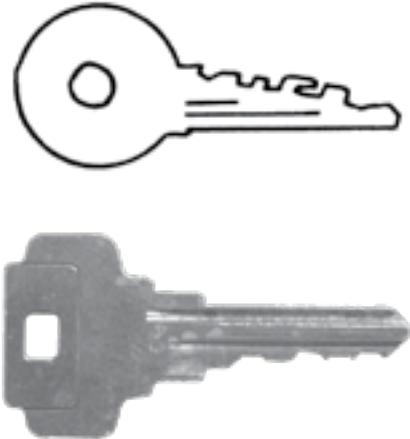
_____ + _____ = _____



_____ + _____ = _____

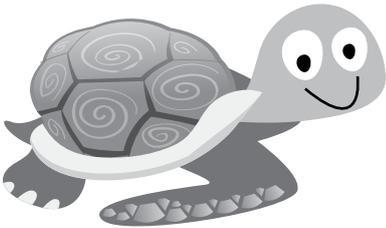
Worksheet 8

Cross (X) the longer and circle the shorter key in each set.

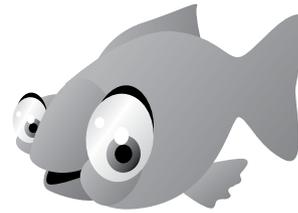
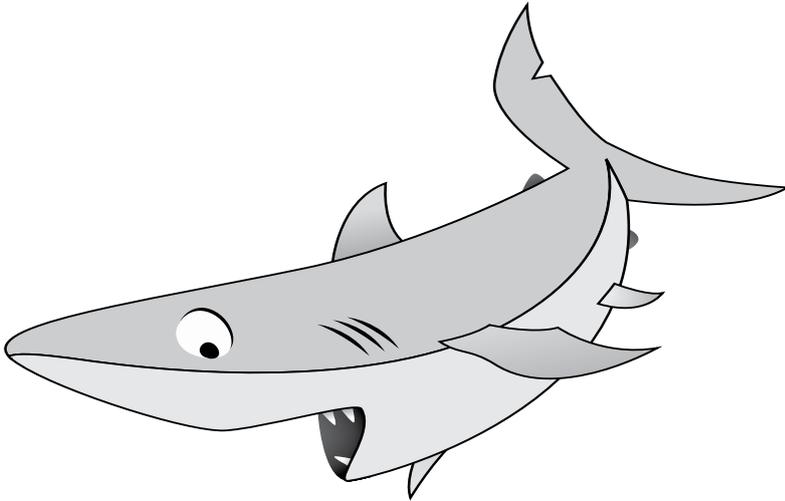
Worksheet 9

Draw lines to match the larger animal to the smaller one.



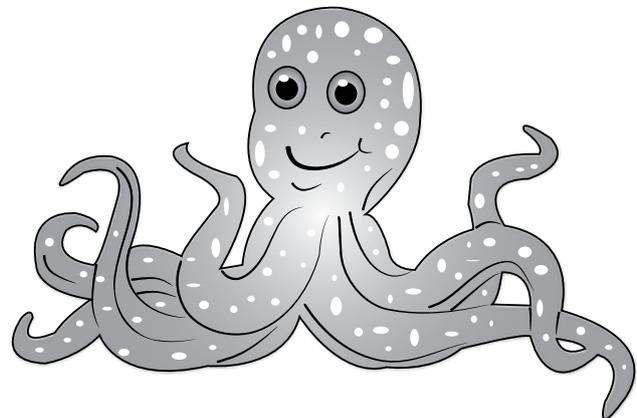
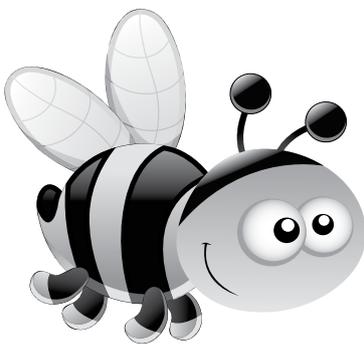
Worksheet 10

Recognize and name the animals and then fill in the blanks.



The _____ is heavier than the _____.

The _____ is lighter than the _____.

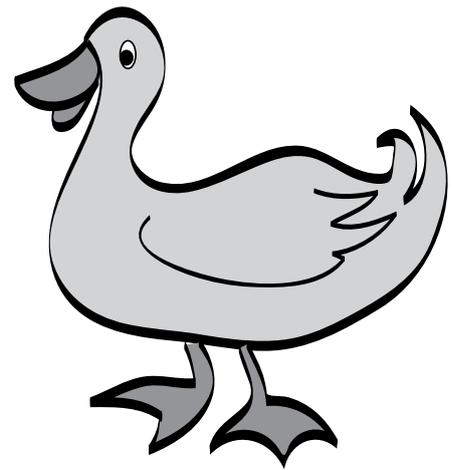
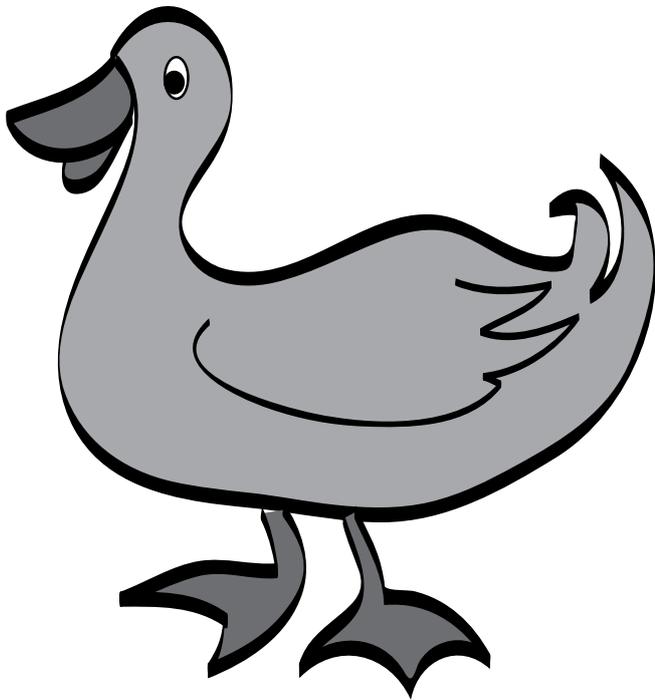


The _____ is heavier than the _____.

The _____ is lighter than the _____.

Worksheet 11

Circle the bigger duck. Cross (X) the duck with the shorter beak. Fill in the blanks.

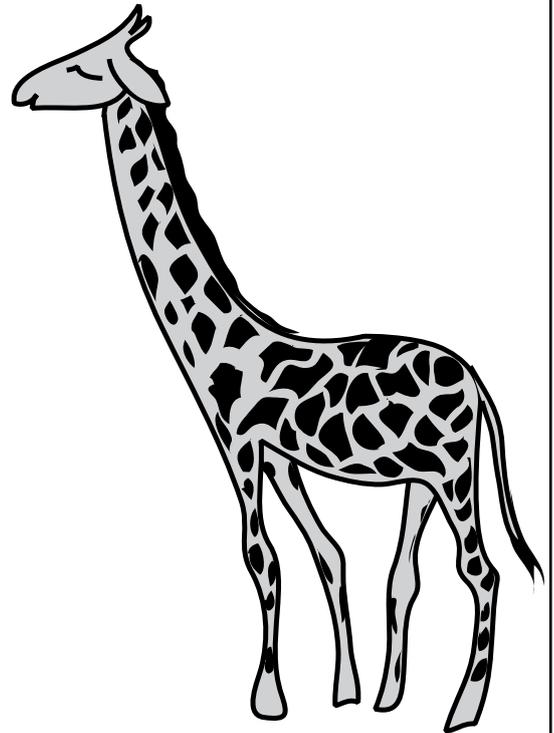
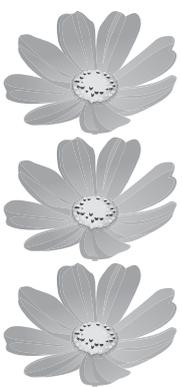


The _____ duck is lighter than the _____ duck.

The _____ duck is taller than the _____ duck.

Worksheet 12

Draw the correct number of flowers besides the giraffe.
Fill in the blanks.

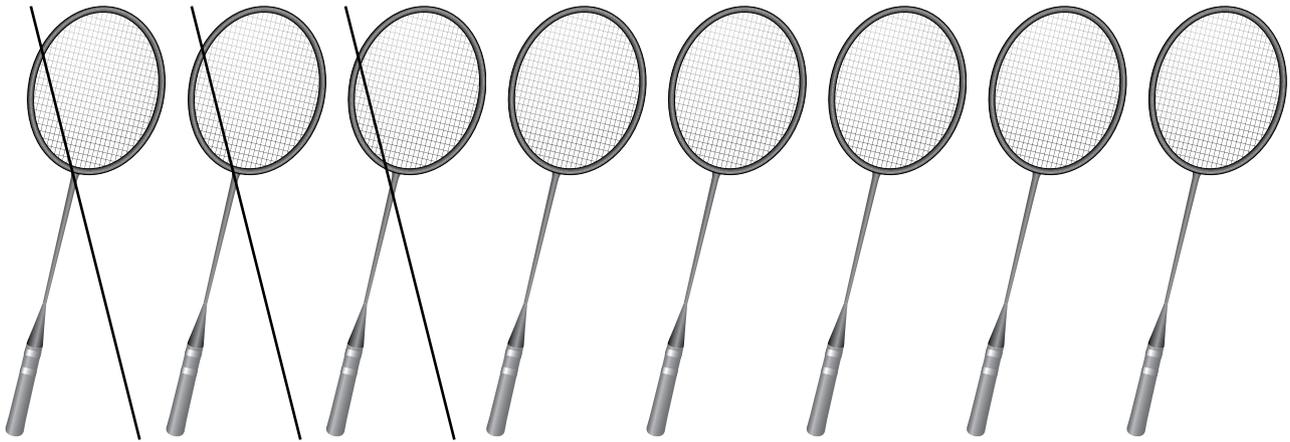


The lion is _____ flowers tall.

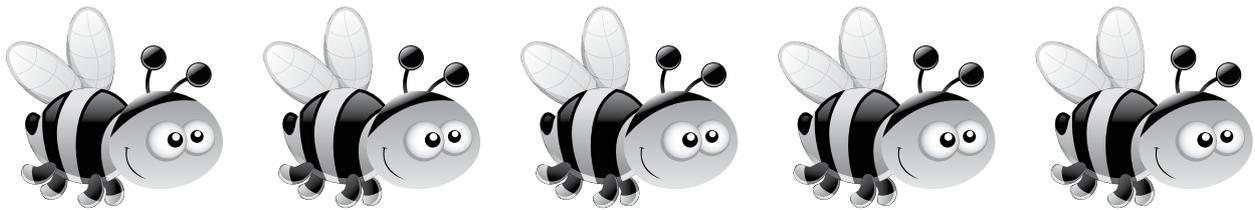
The giraffe is _____ flowers tall.

Worksheet 13

Count the objects. See the subtraction sentence and then cross (X) the correct number of objects. Fill in the blanks.



$$8 - 3 = \underline{\quad}$$



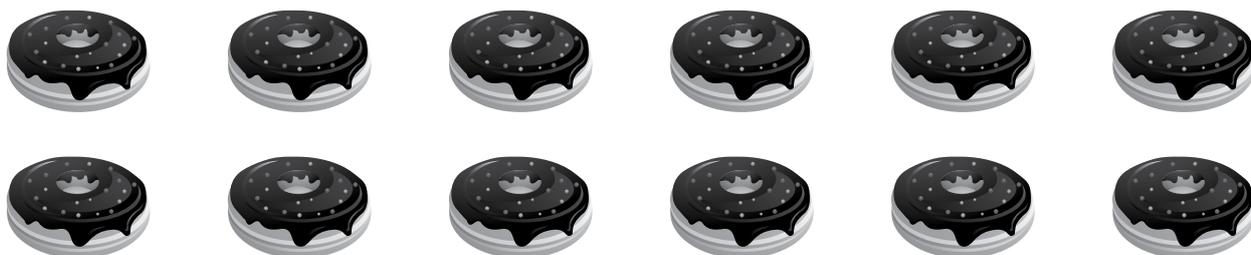
$$5 - 1 = \underline{\quad}$$



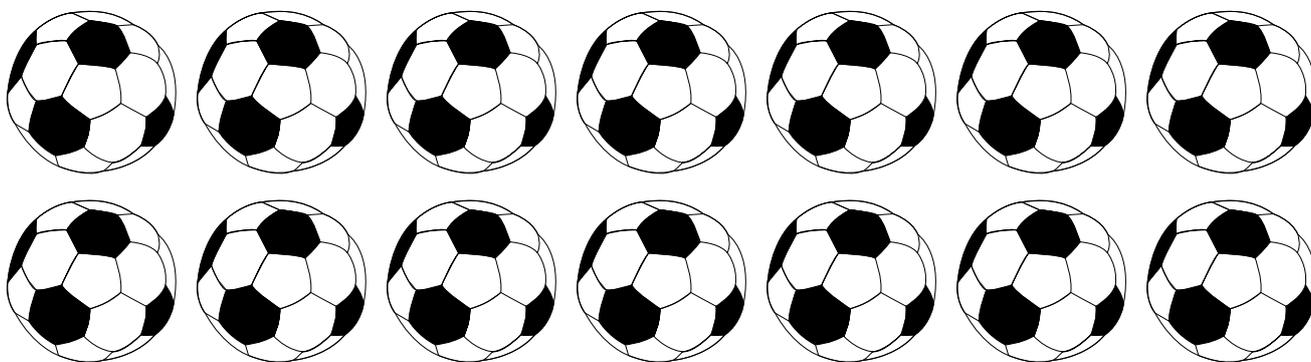
$$7 - 5 = \underline{\quad}$$

Worksheet 14

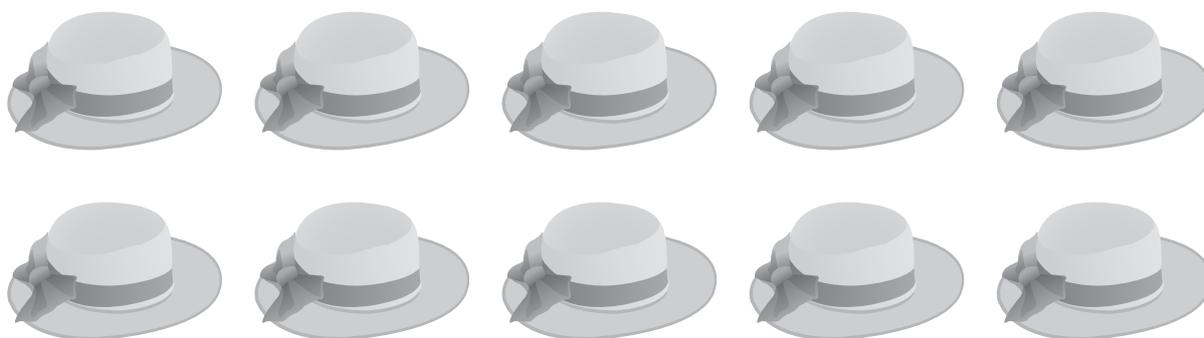
Count the objects. See the subtraction sentence and then cross (X) the correct number of objects. Fill in the blanks.



$$12 - 7 = \underline{\quad}$$



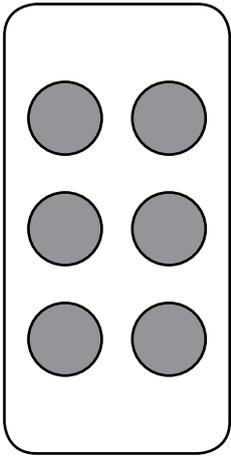
$$14 - 8 = \underline{\quad}$$



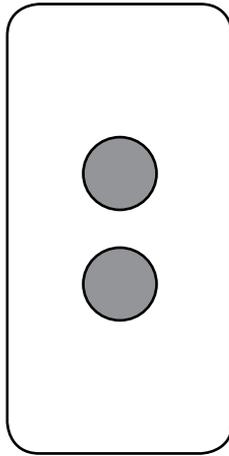
$$10 - 5 = \underline{\quad}$$

Worksheet 15

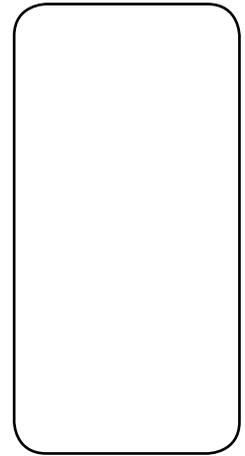
Subtract and fill in the blanks. Draw the correct numbers of polka dots in the last box.



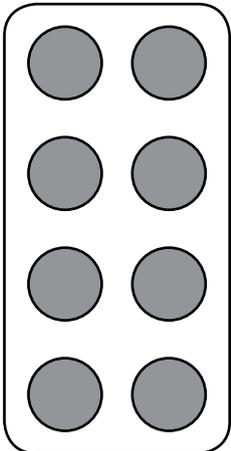
-



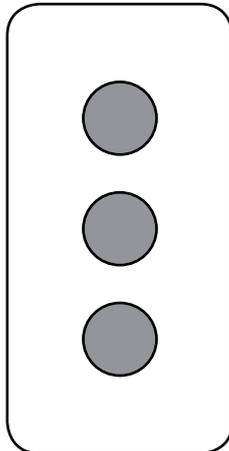
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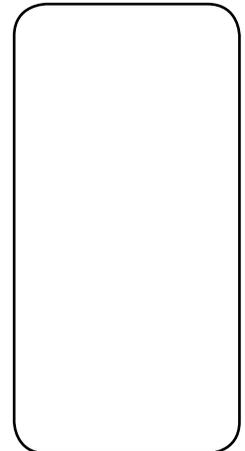
$$6 - 2 = \underline{\quad}$$



-



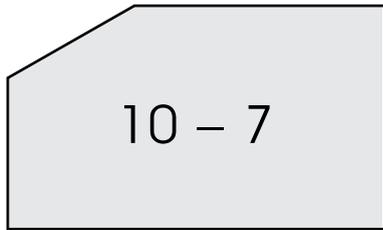
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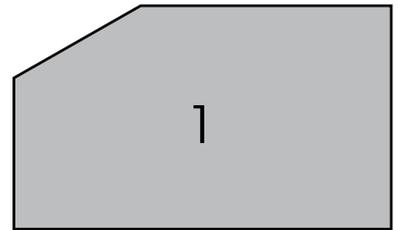


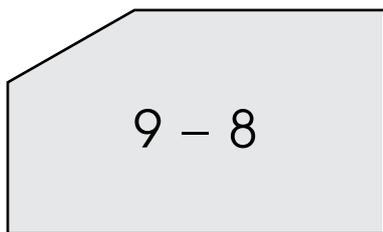
$$8 - 3 = \underline{\quad}$$

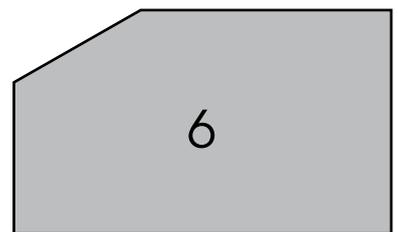
Worksheet 16

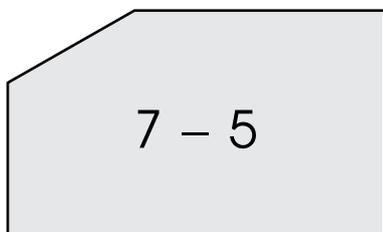
Subtract and match to the correct answers.

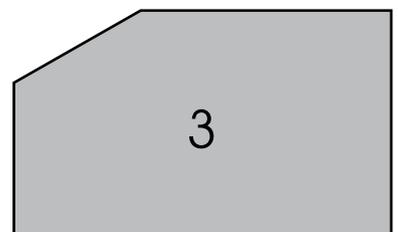

$$10 - 7$$

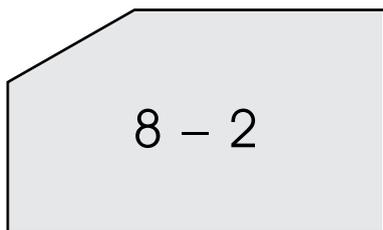

$$1$$

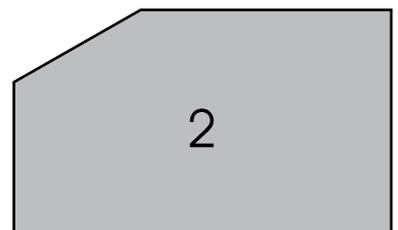

$$9 - 8$$


$$6$$


$$7 - 5$$

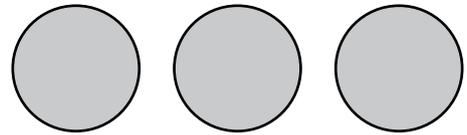
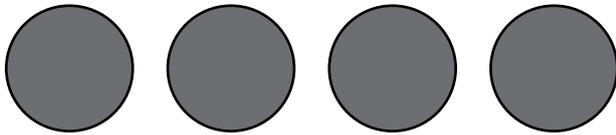
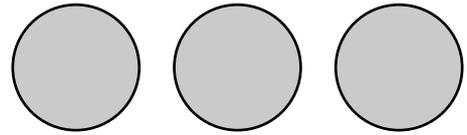
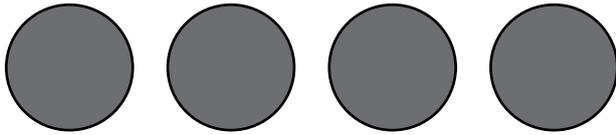

$$3$$


$$8 - 2$$


$$2$$

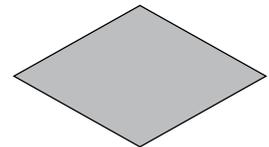
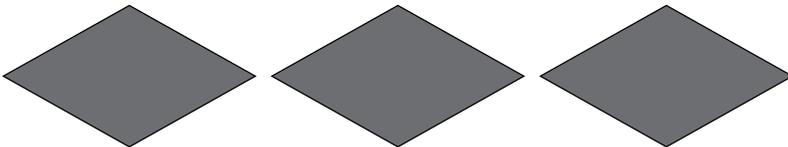
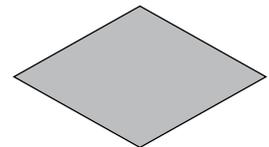
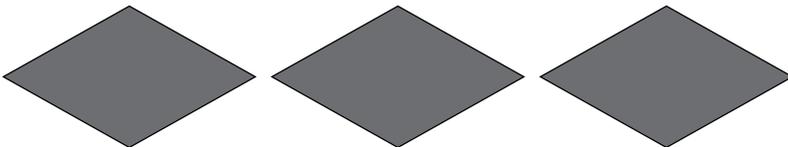
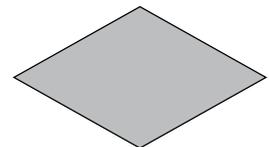
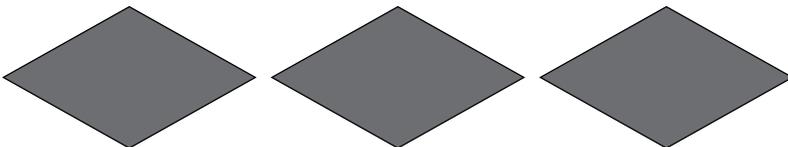
Worksheet 17

Subtract by counting backward using a number line.
Fill in the blanks.



$$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$$

8 is more than 6.

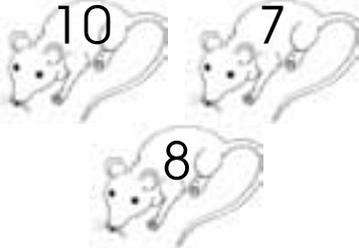
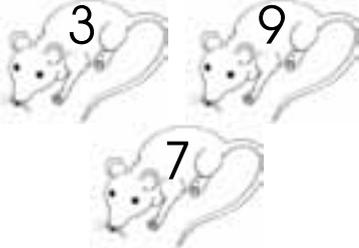
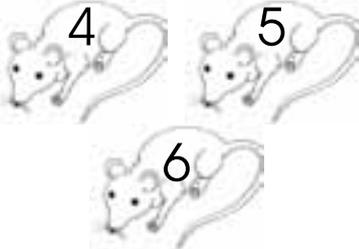
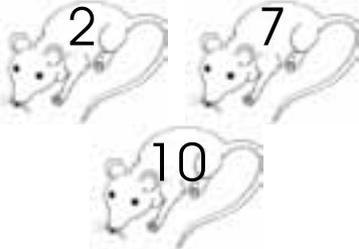
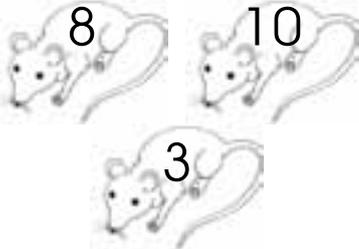
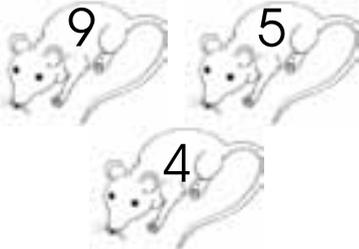
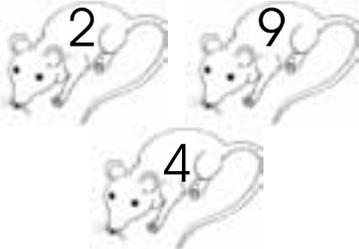
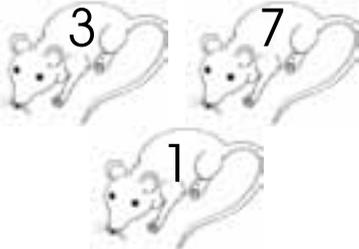
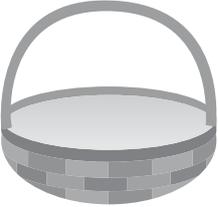
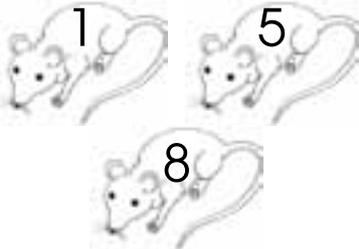
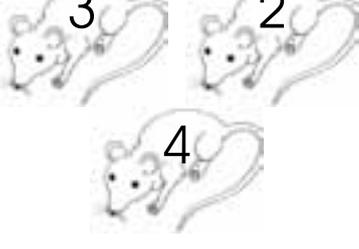


$$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$$

9 is more than 3.

Worksheet 18

Add the numbers in each box. Colour the mice with the correct answers. Next, join the answers from 10 to 1 to help the cat to its home.

<p>Start</p> 	<p>$8 + 2$</p> 	<p>$8 + 1$</p> 
<p>$4 + 2$</p> 	<p>$5 + 2$</p> 	<p>$4 + 4$</p> 
<p>$3 + 2$</p> 	<p>$1 + 3$</p> 	<p>$3 + 0$</p> 
 <p>Home</p>	<p>$1 + 0$</p> 	<p>$1 + 1$</p> 

Worksheet 19

Add or subtract. Colour the balloons as given.

$10 + 0$ (red)

$2 + 3$ (yellow)

$9 - 2$ (green)

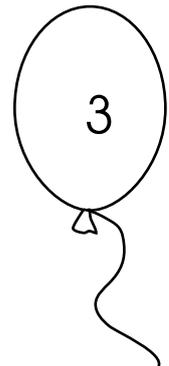
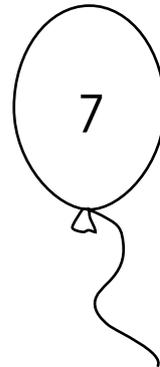
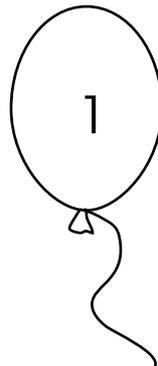
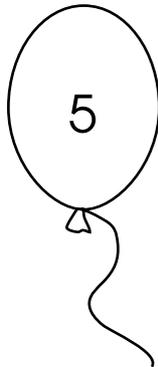
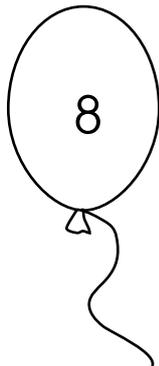
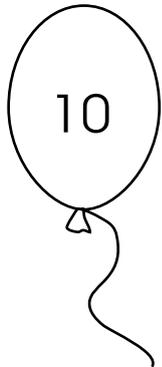
$1 - 0$ (brown)

$8 - 5$ (blue)

$4 + 4$ (purple)

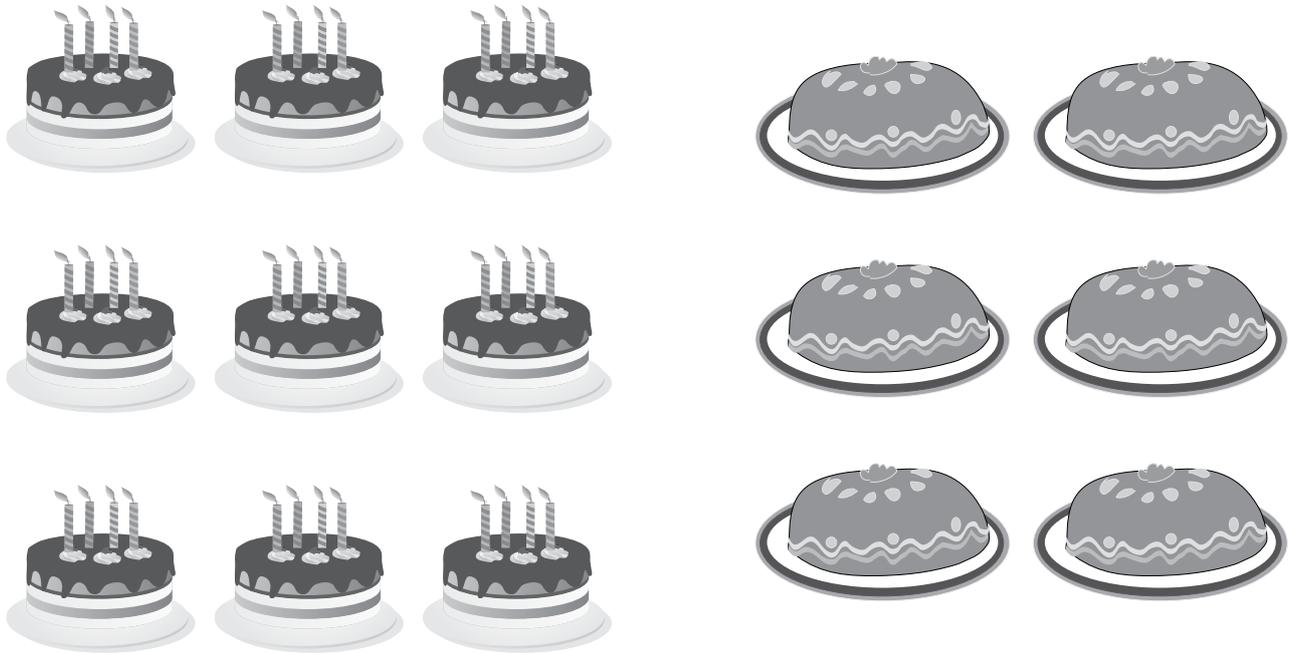
$10 - 0$ (red)

$4 + 3$ (green)



Worksheet 20

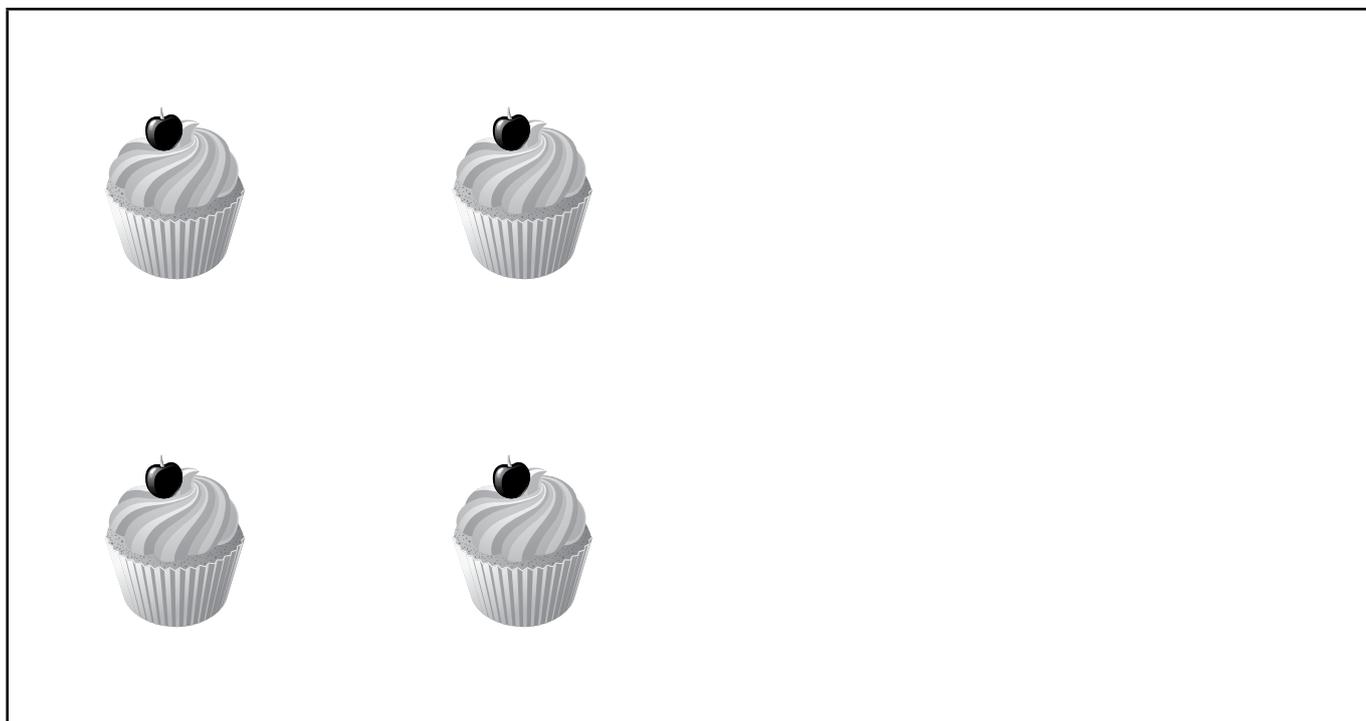
Count on to write how many cakes are there altogether.



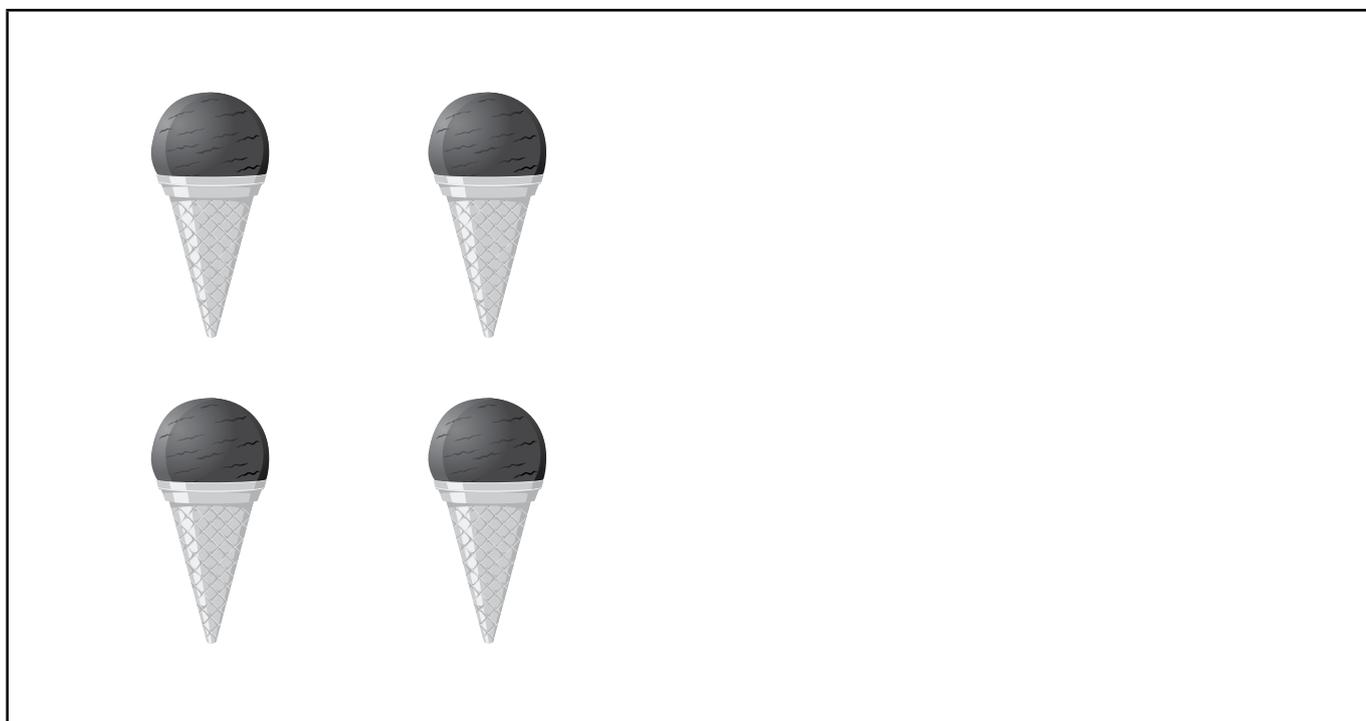
There are _____ cakes altogether.

Worksheet 21

Draw more to make 7.

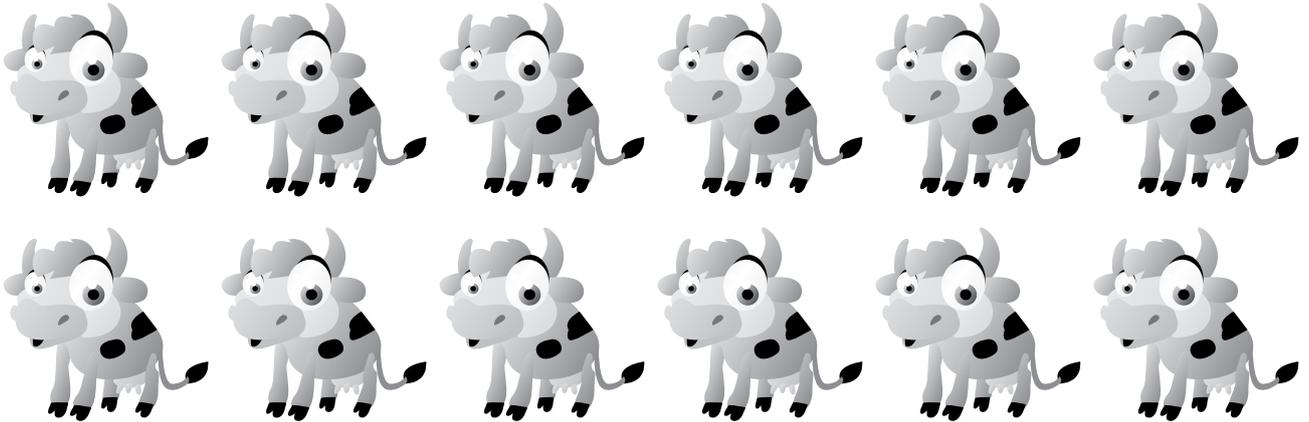


Draw more to make 8.

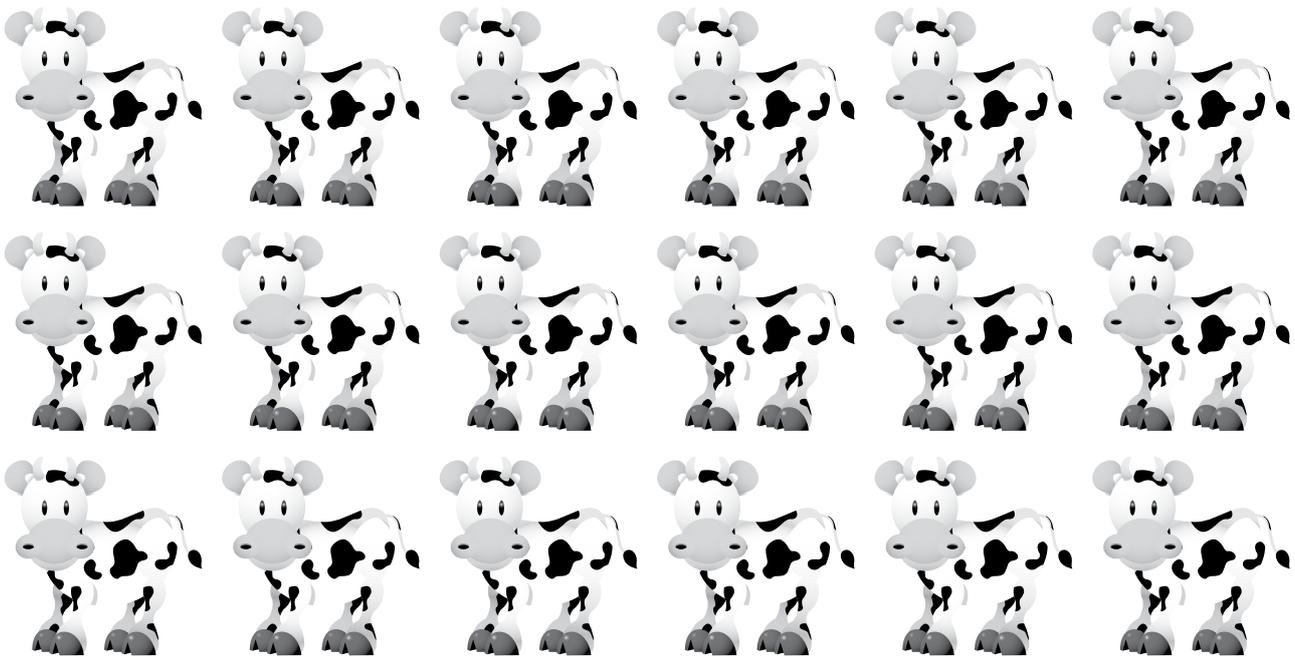


Worksheet 22

Cross (X) out the correct number of animals and write the answers.



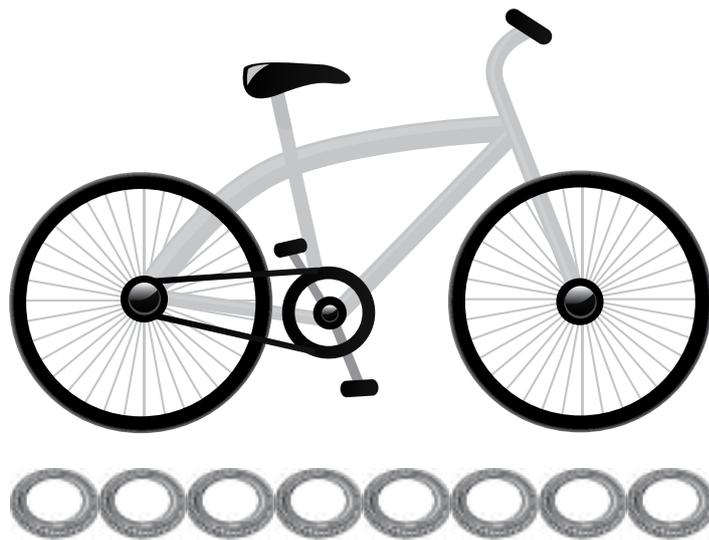
$$12 - 4 = \underline{\quad}$$



$$18 - 8 = \underline{\quad}$$

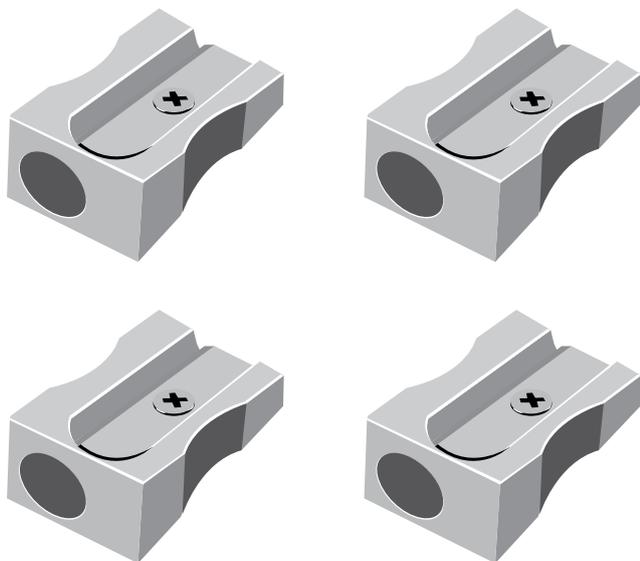
Worksheet 23

Which one is Neha's bicycle?



Worksheet 24

Draw more sharpeners to add.

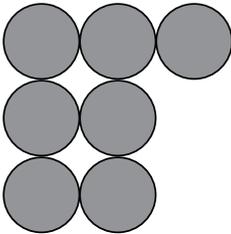
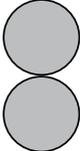
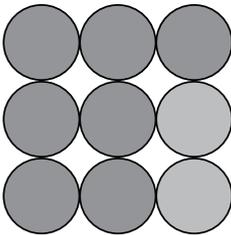
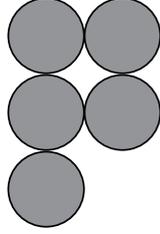
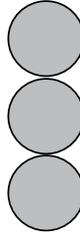
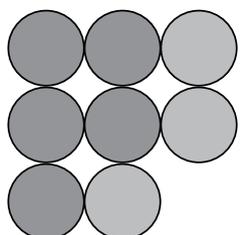
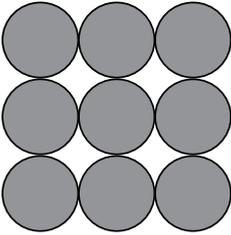
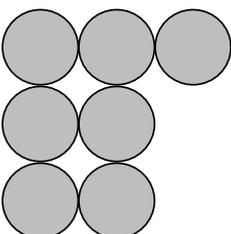
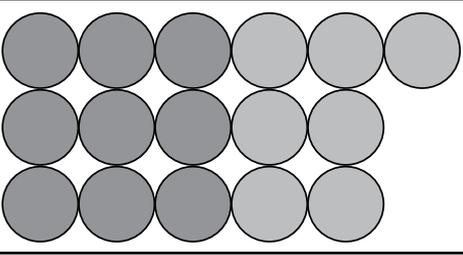
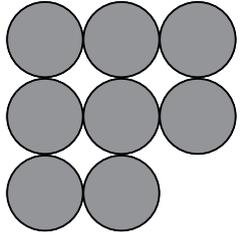
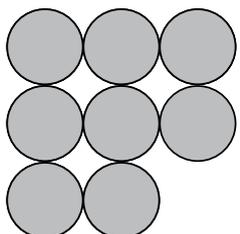
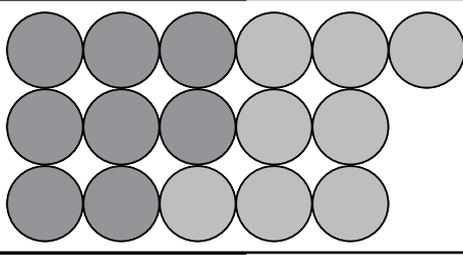


$$4 + 3 = \underline{\hspace{2cm}}$$

There are sharpeners now.

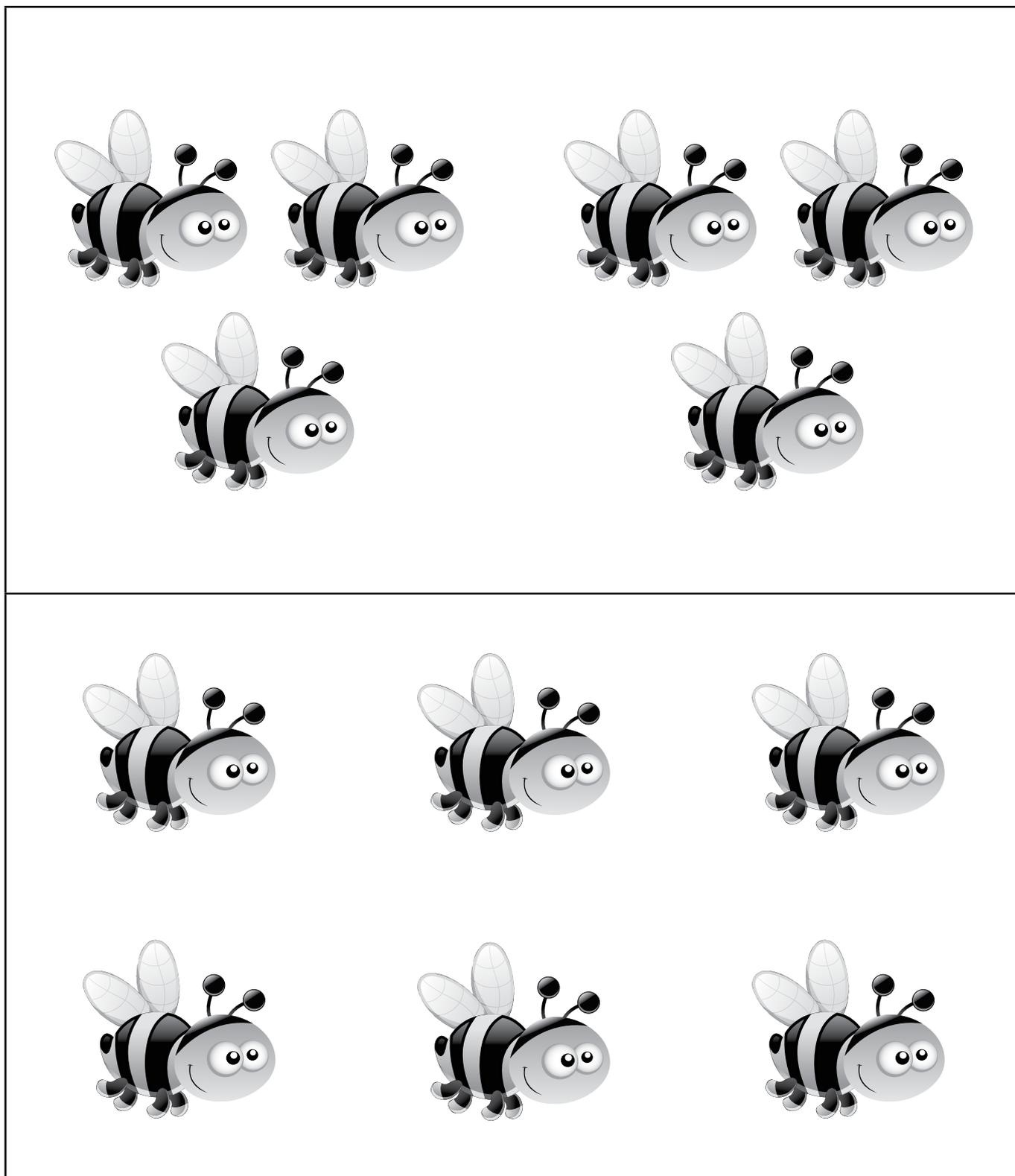
Worksheet 25

Count on to add.

<p>7</p>  <p>+ 2</p>  <hr/>  <hr/>	<p>5</p>  <p>+ 3</p>  <hr/>  <hr/>
<p>9</p>  <p>+ 7</p>  <hr/>  <hr/>	<p>8</p>  <p>+ 8</p>  <hr/>  <hr/>

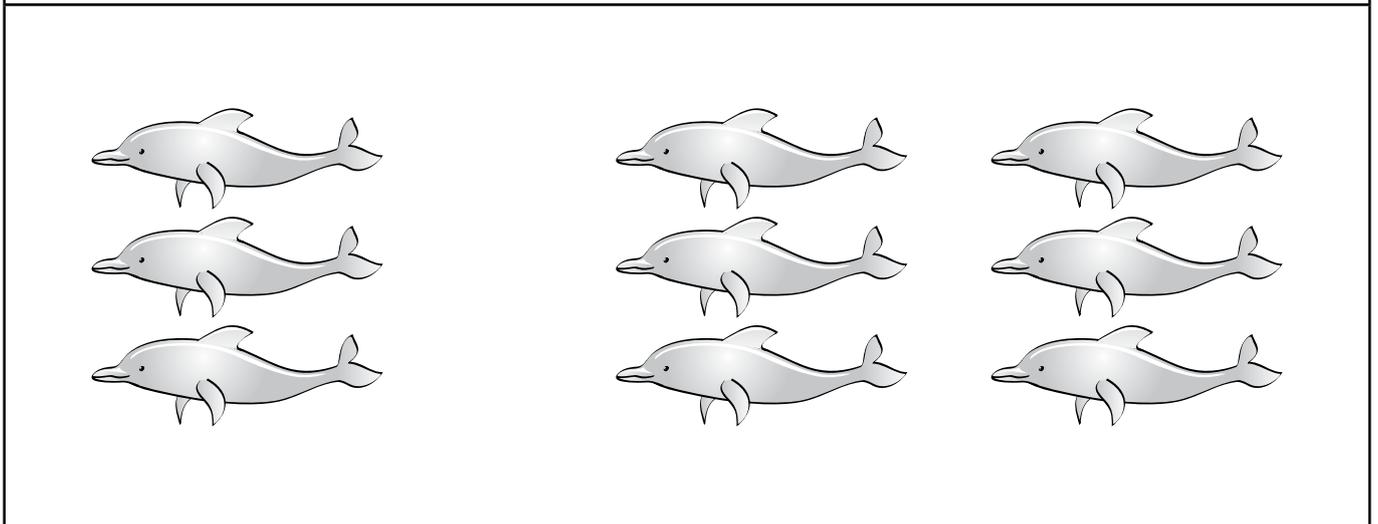
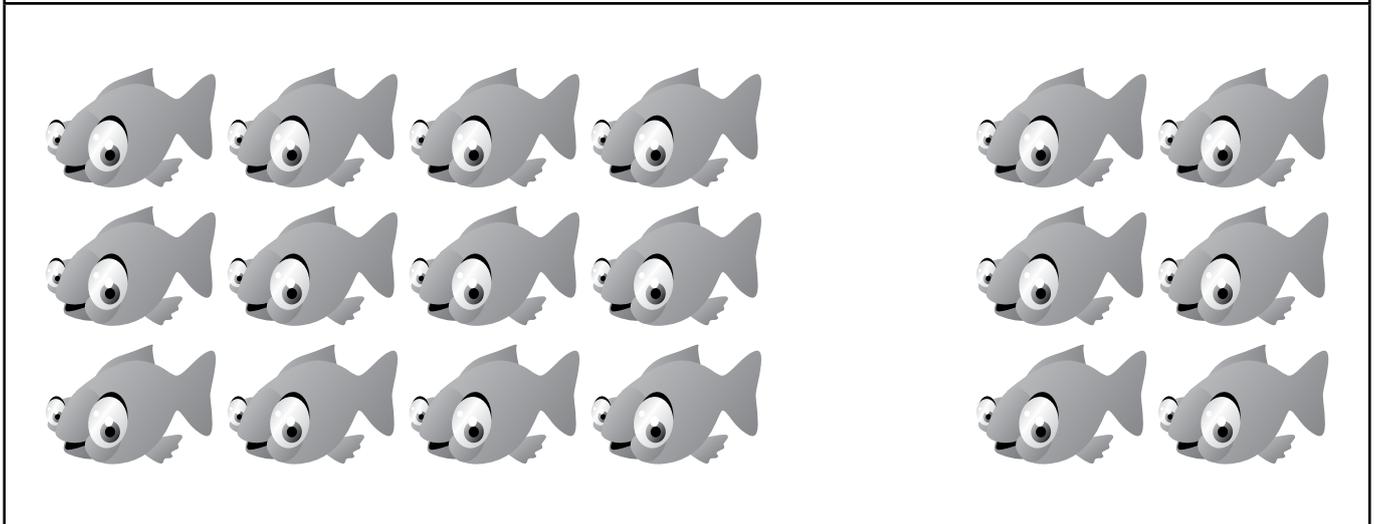
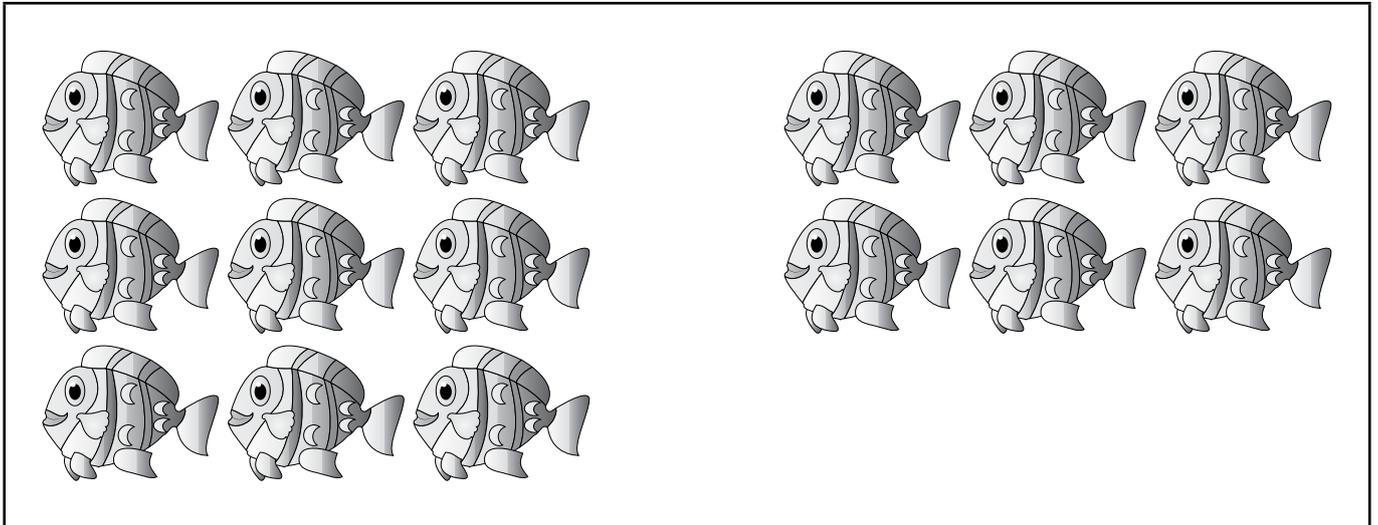
Worksheet 26

Circle in groups of 3.



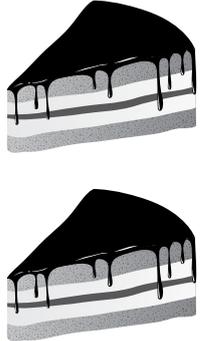
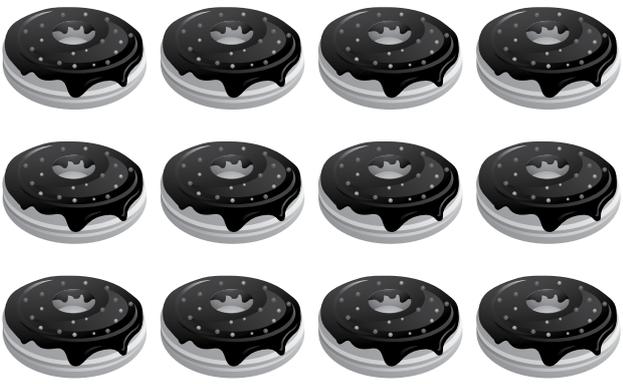
Worksheet 27

Count in groups of 3. Circle the set that has more groups.



Worksheet 28

Circle in groups of 2. Draw more on the right to equal the groups on the left.

Worksheet 29

Fill in the missing numbers.

10			7	
----	--	--	---	--

8				4
---	--	--	--	---

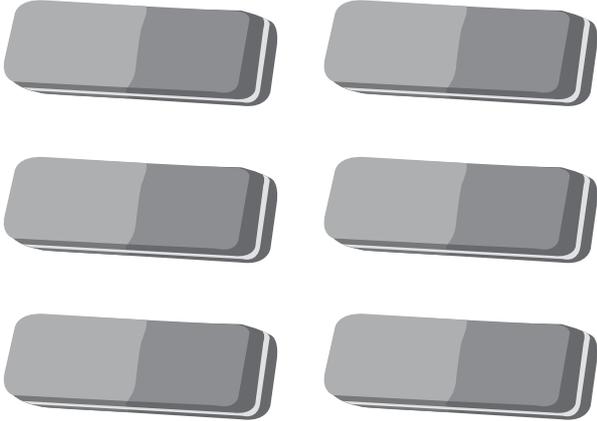
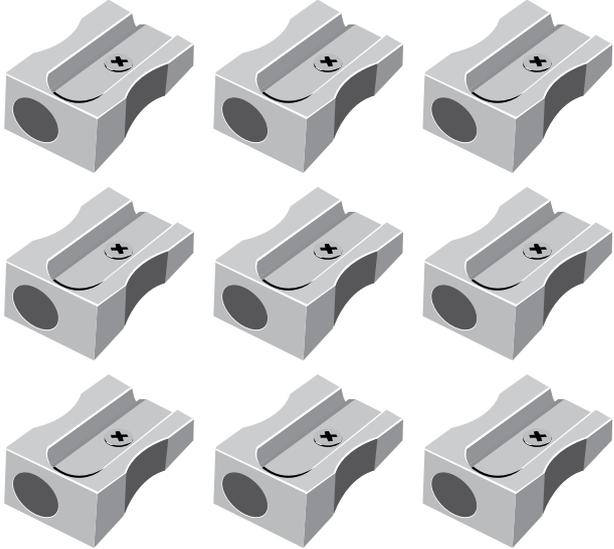
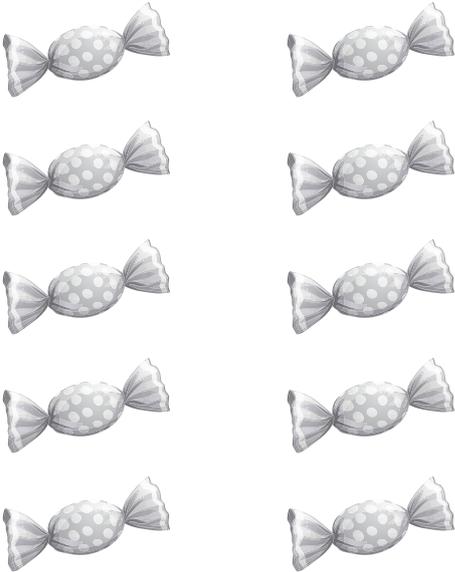
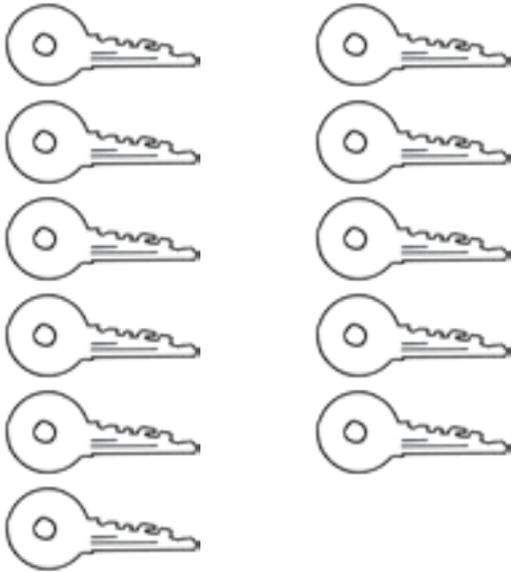
		4	3	
--	--	---	---	--

5				
---	--	--	--	--

			4	3
--	--	--	---	---

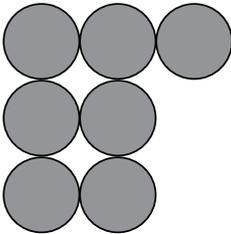
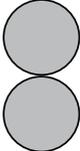
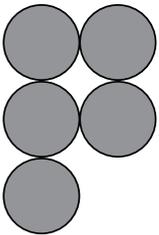
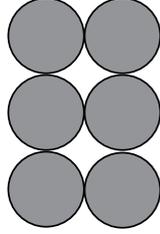
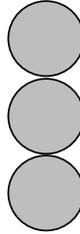
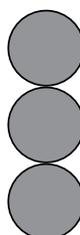
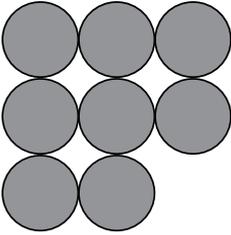
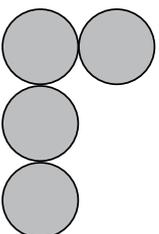
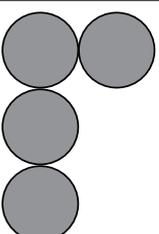
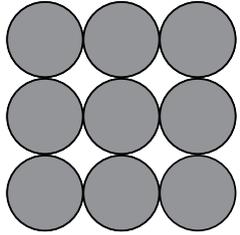
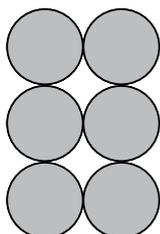
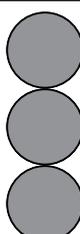
Worksheet 30

Cross (X) out the correct number of objects and write the answers.

 <p>$6 - 2 = \underline{\quad}$</p>	 <p>$9 - 4 = \underline{\quad}$</p>
 <p>$10 - 5 = \underline{\quad}$</p>	 <p>$11 - 4 = \underline{\quad}$</p>

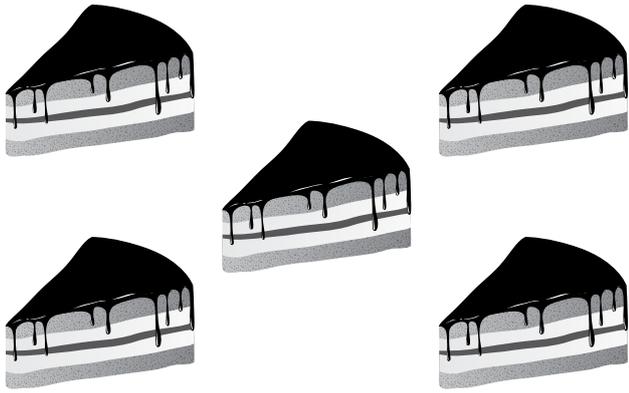
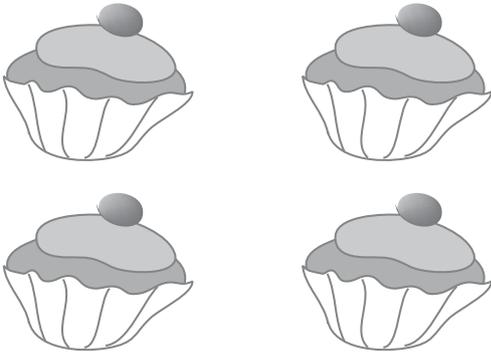
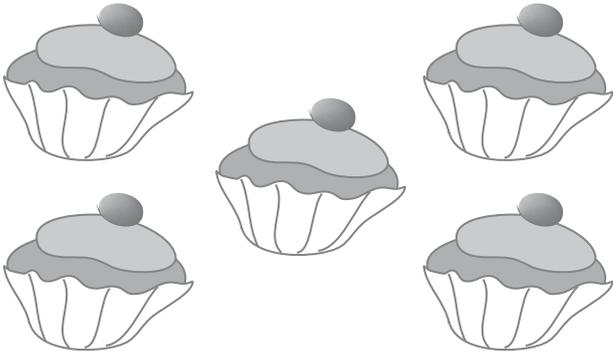
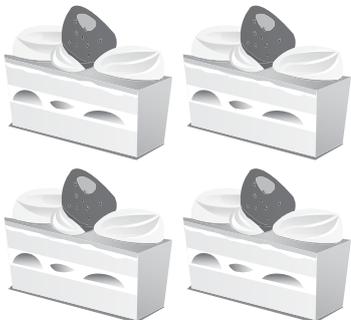
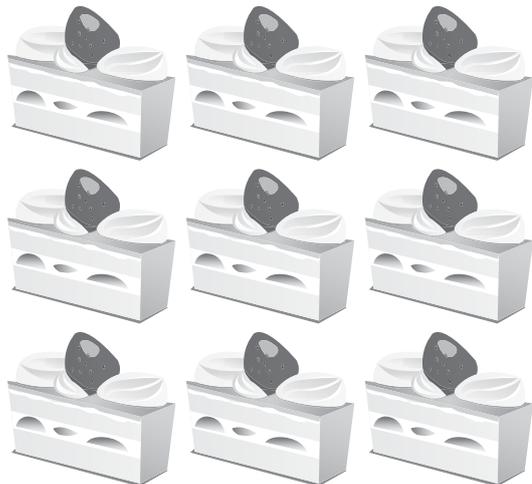
Worksheet 31

Count and subtract.

<p>7</p>  <p>- 2</p>  <hr/>  <hr/>	<p>6</p>  <p>- 3</p>  <hr/>  <hr/>
<p>8</p>  <p>- 4</p>  <hr/>  <hr/>	<p>9</p>  <p>- 6</p>  <hr/>  <hr/>

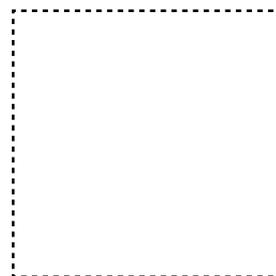
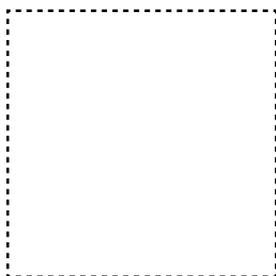
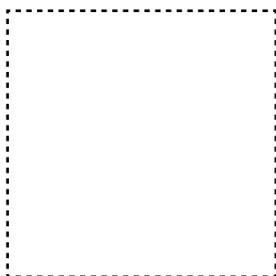
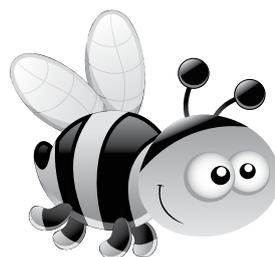
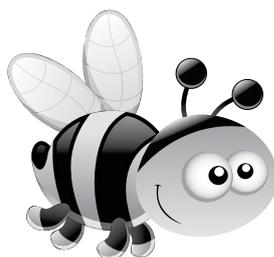
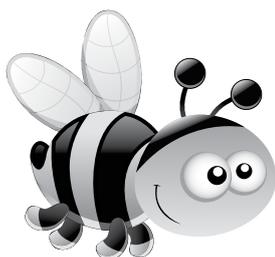
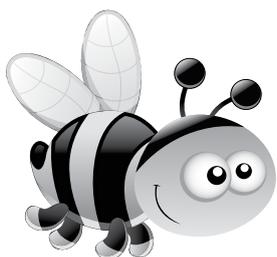
Worksheet 32

Cross (X) the objects to make the two sets equal.

Worksheet 33

Cut and paste the ordinal numbers in the correct order.



4th
Fourth

1st
First

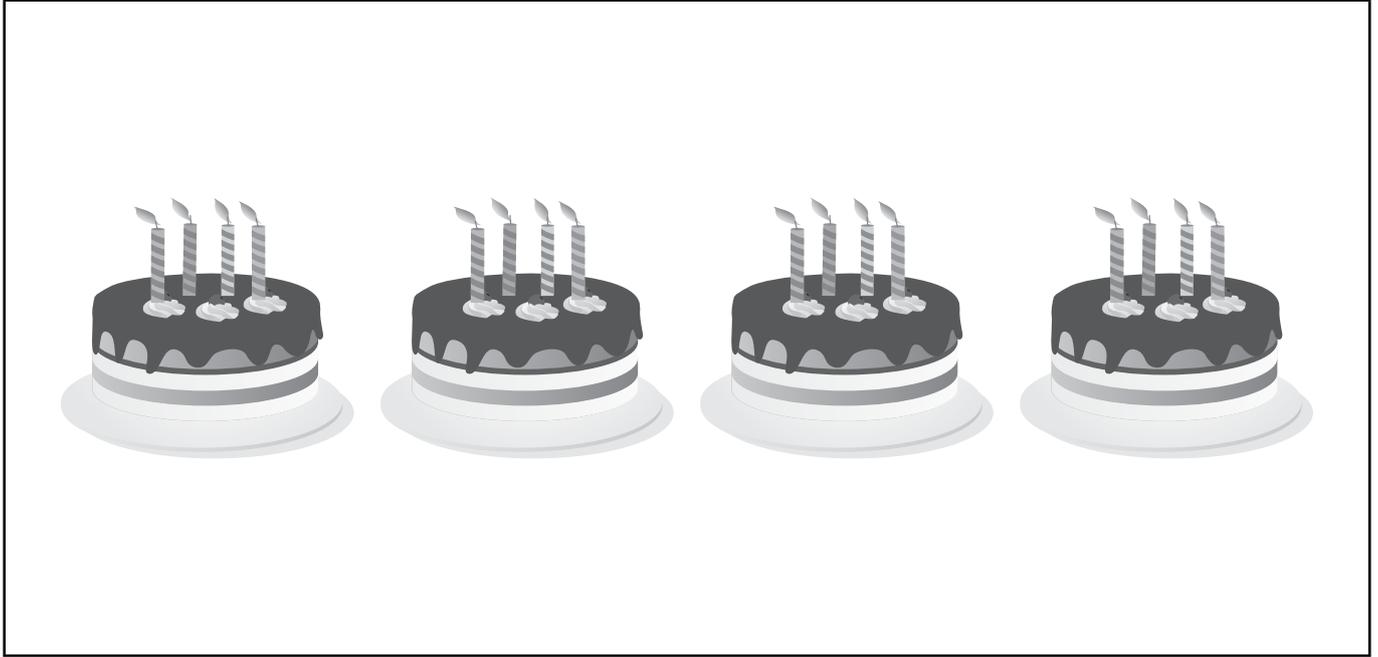
2nd
Second

3rd
Third

Worksheet 34

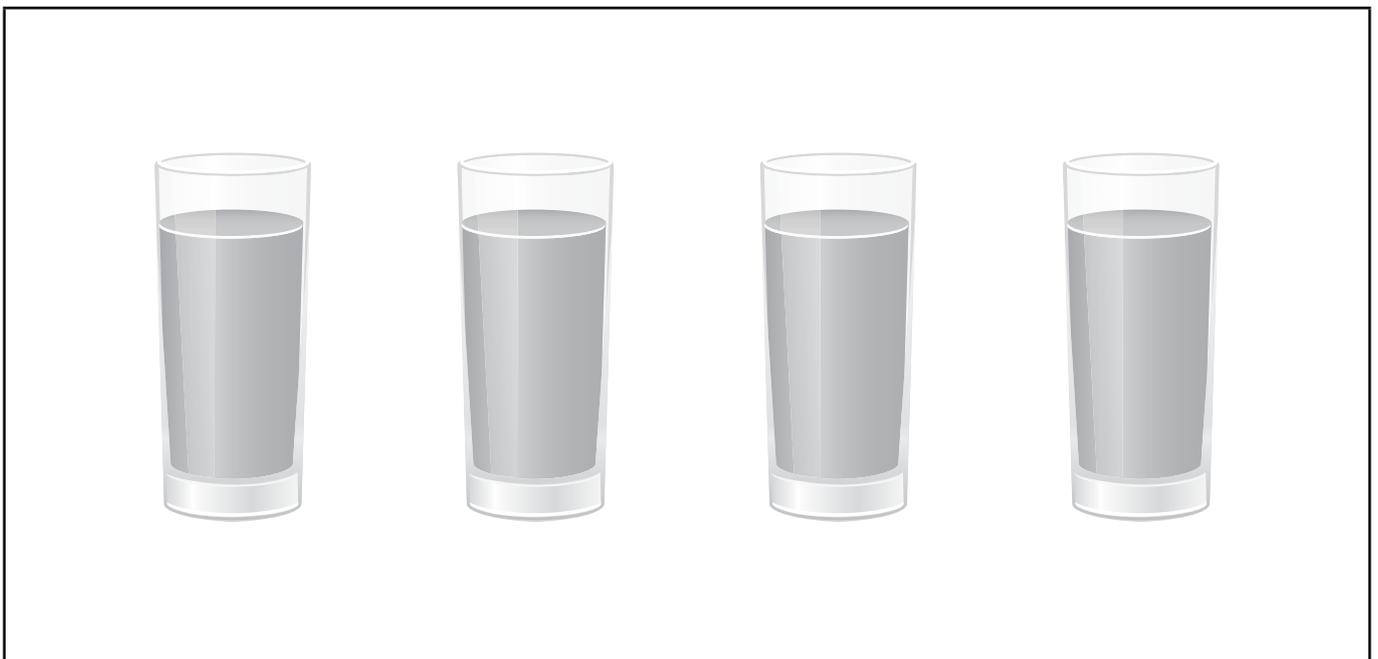
Circle the second cake.

Draw a line under the fourth cake.



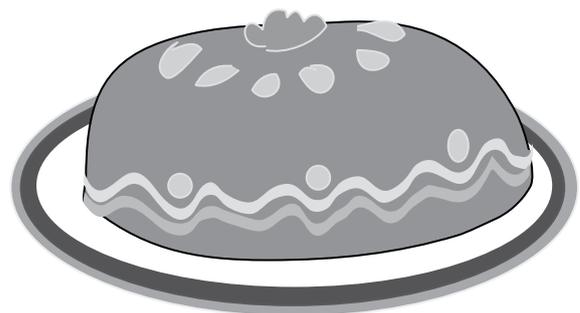
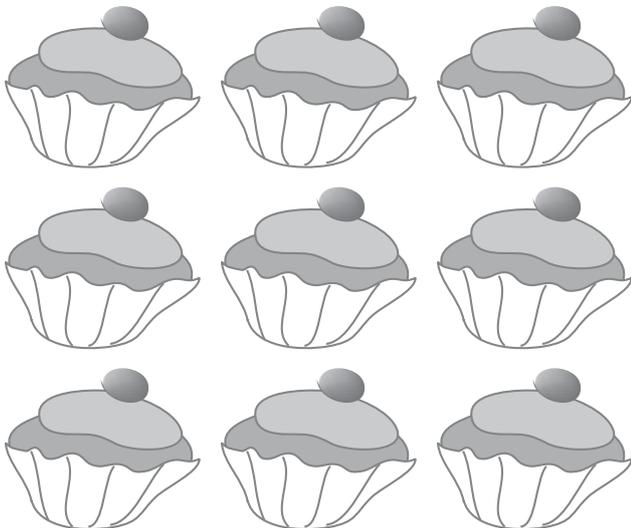
Circle the third drink.

Draw a line under the first drink.



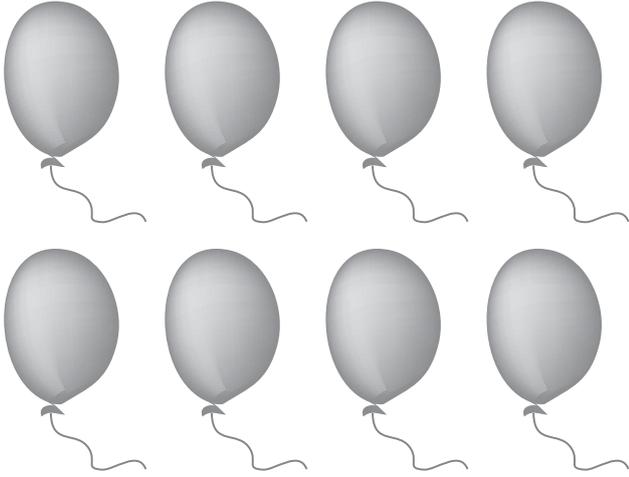
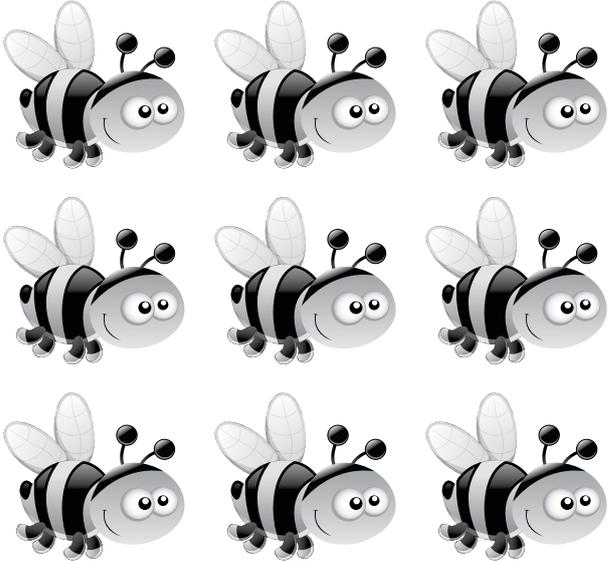
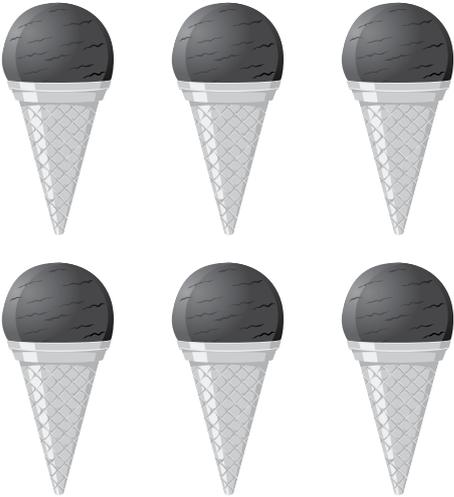
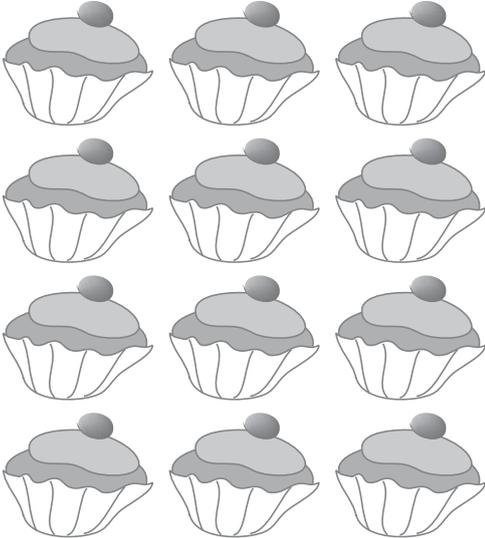
Worksheet 35

Count the items and then list from 1st to 4th in order, starting with the most.



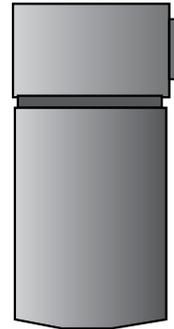
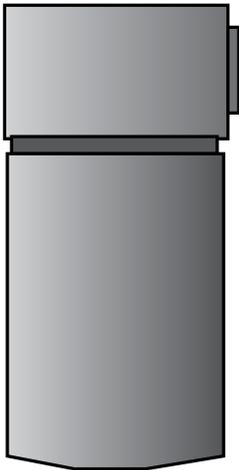
Worksheet 36

Count the items and then list 'first' to 'fourth' starting with the fewest.

 <input data-bbox="264 1017 646 1131" type="text"/>	 <input data-bbox="948 1023 1329 1137" type="text"/>
 <input data-bbox="264 1773 646 1887" type="text"/>	 <input data-bbox="948 1788 1329 1902" type="text"/>

Worksheet 37

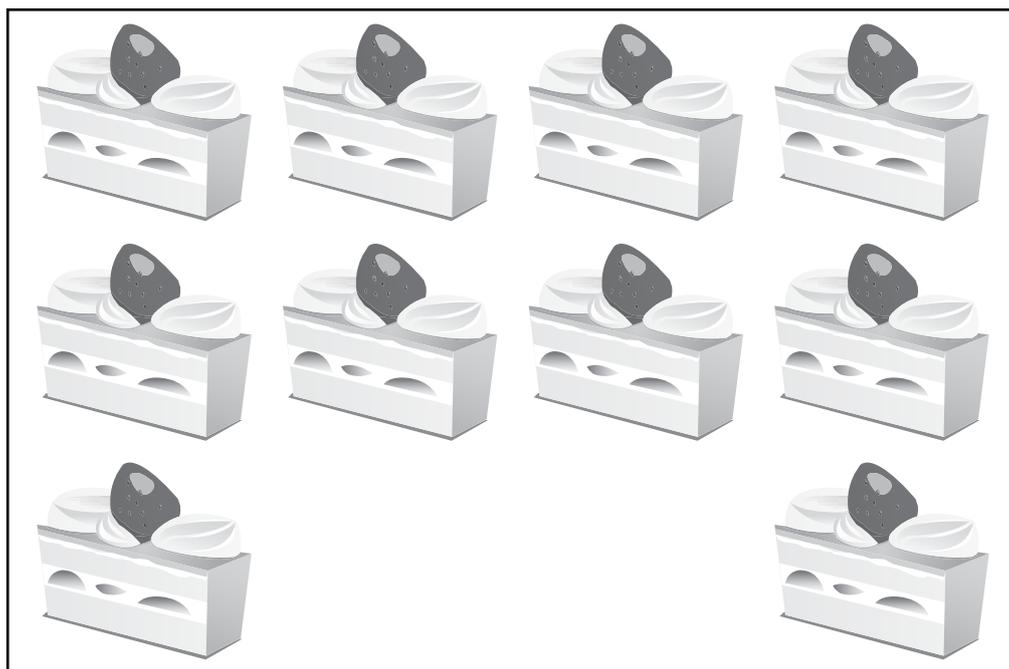
Circle the container that can hold more.



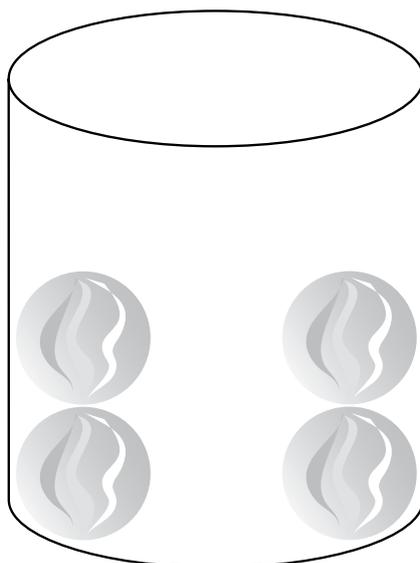
Worksheet 38

Draw more to fill each container.

The box can hold 12 cakes.

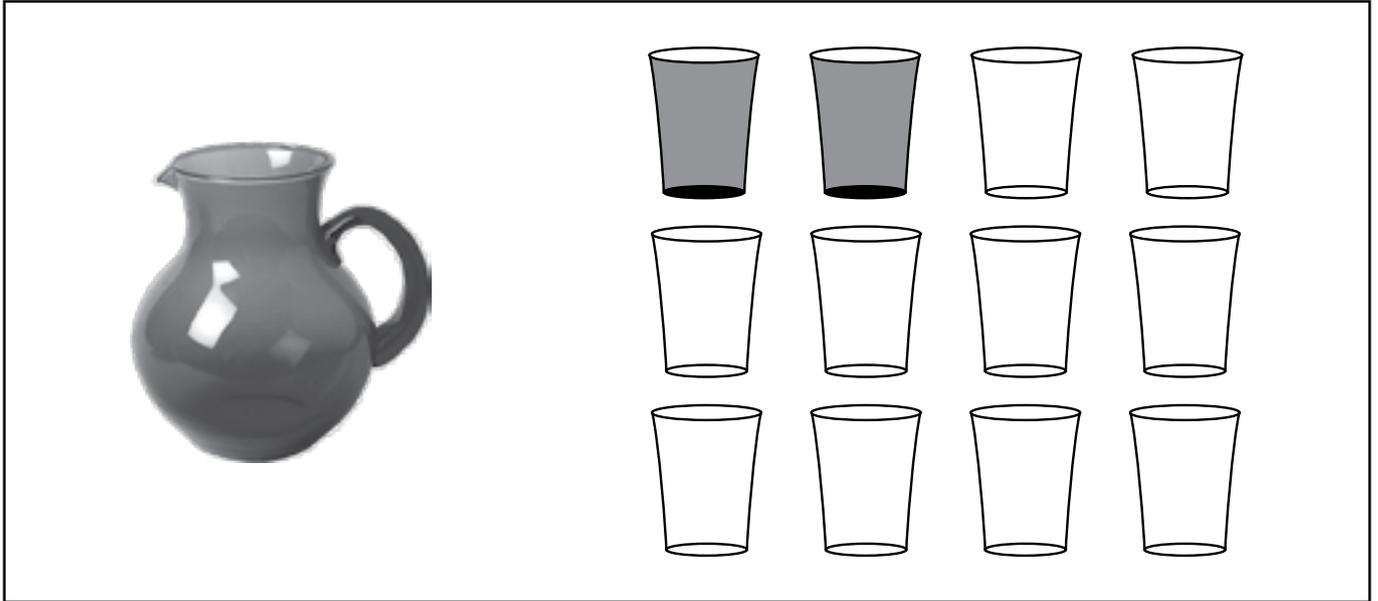


The jar can hold 9 marbles.

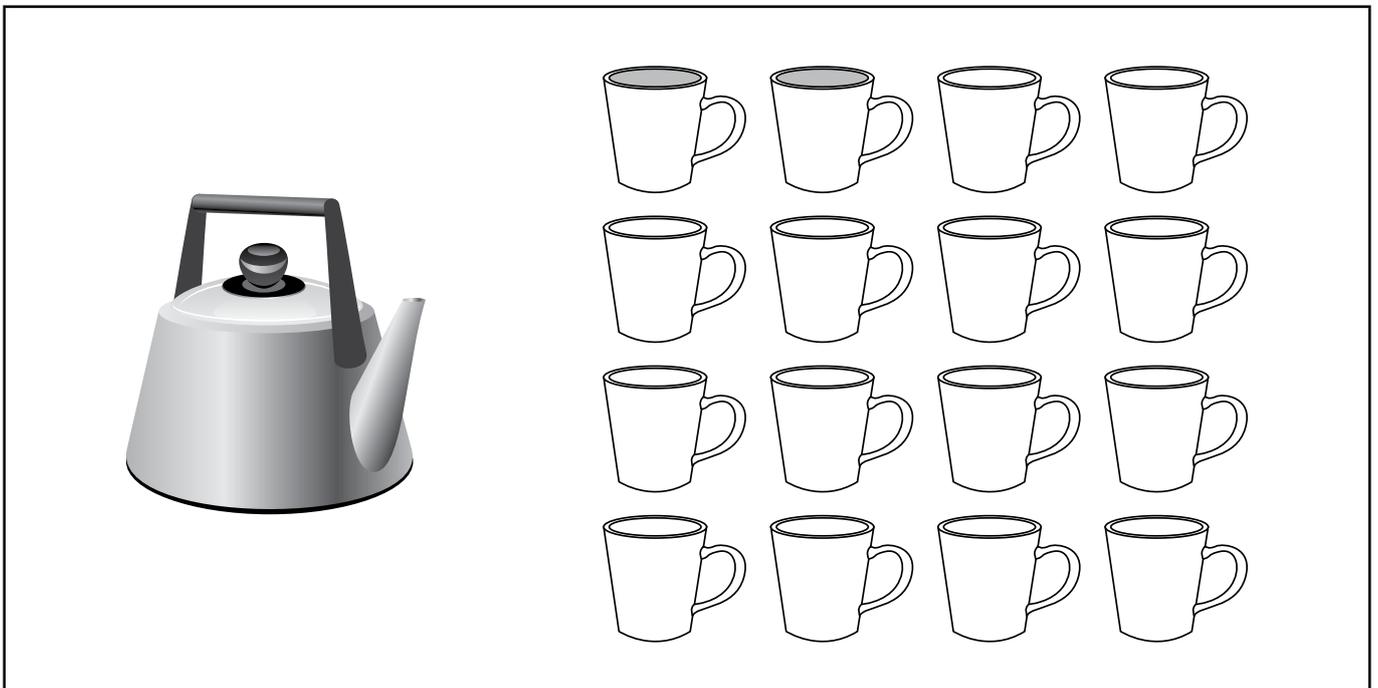


Worksheet 39

The jug can fill eight glasses. Two are already filled. Colour to fill the rest.

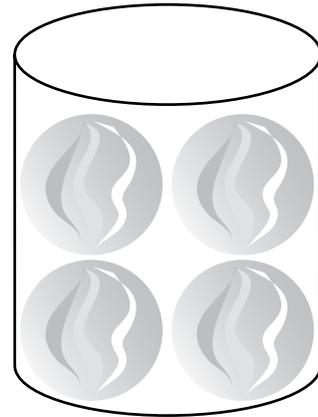
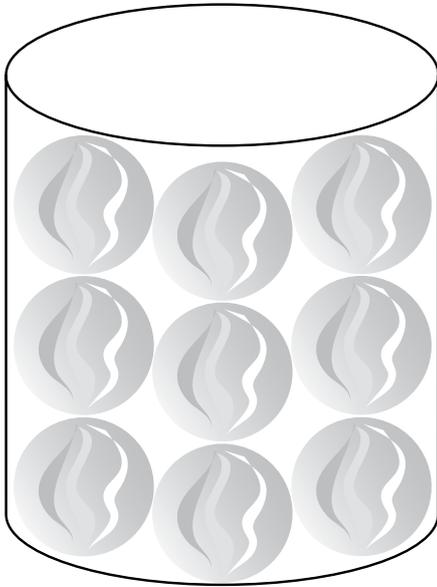


The kettle can fill 12 cups. Two are already filled. Colour to fill the rest.

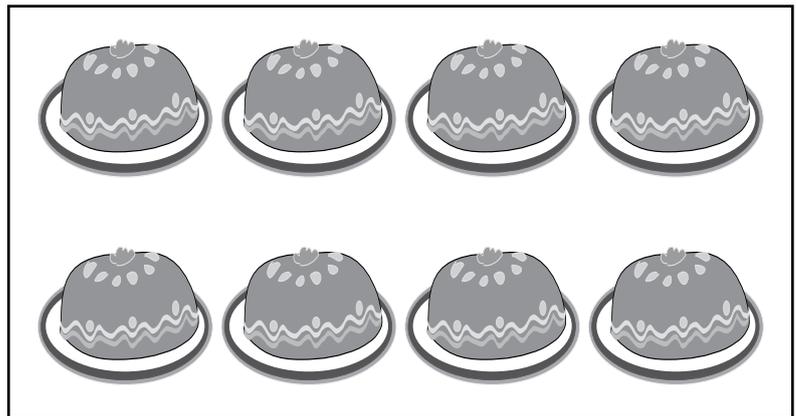
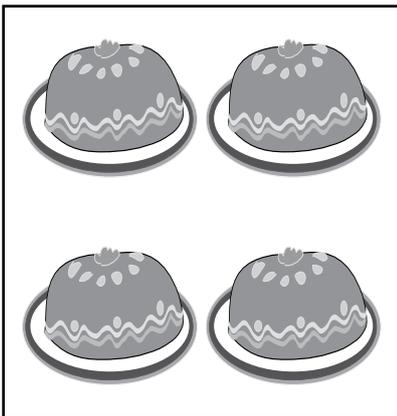


Worksheet 40

Circle the jar that holds more marbles.

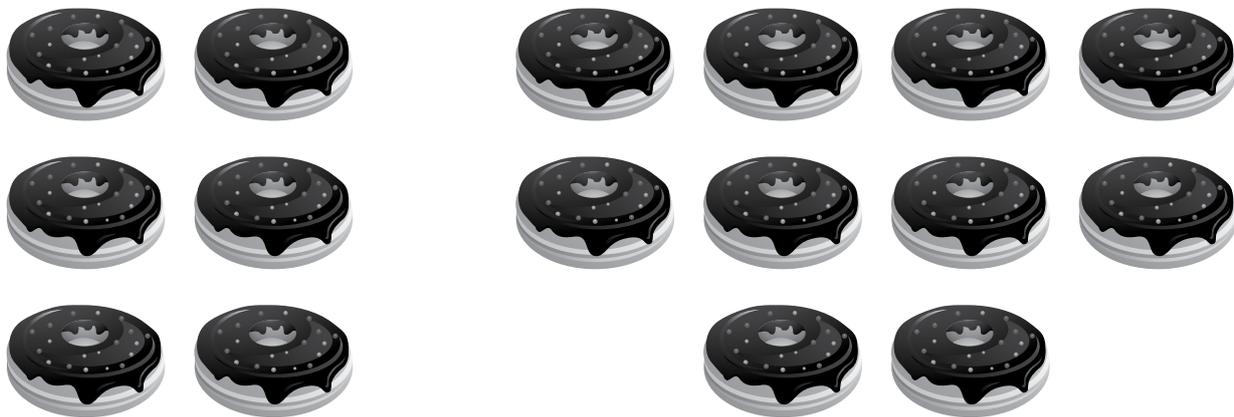


Circle the box that holds fewer cakes.



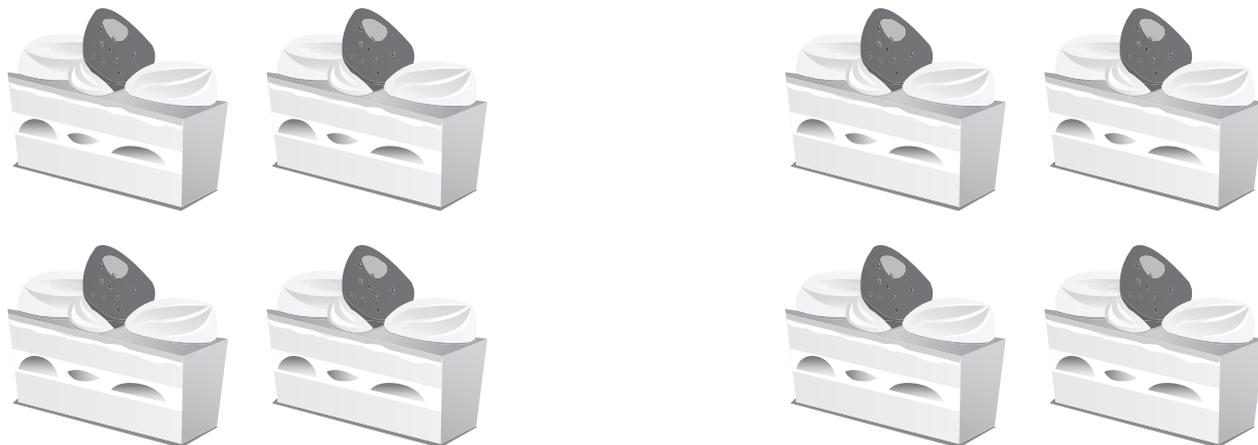
Worksheet 41

Count and fill in the blanks.



$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$

There are doughnuts altogether.

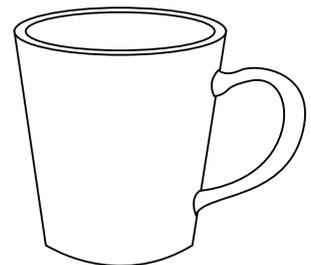
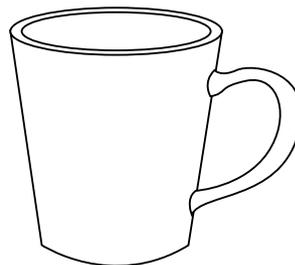
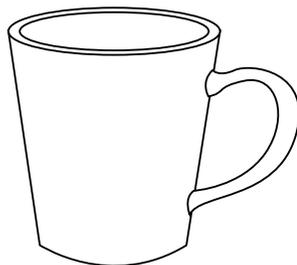
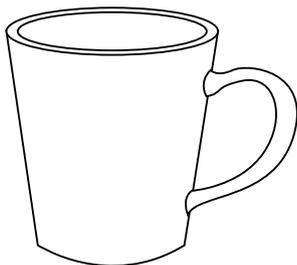
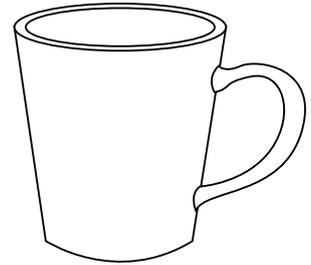
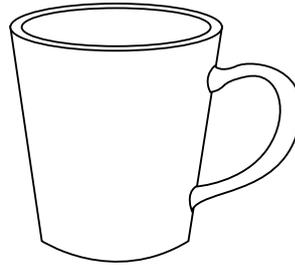
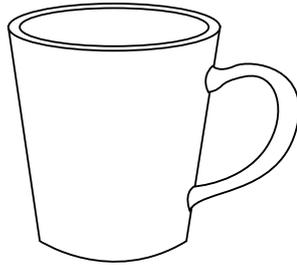
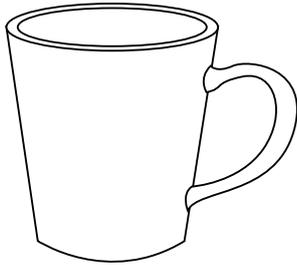


$$\underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad}$$

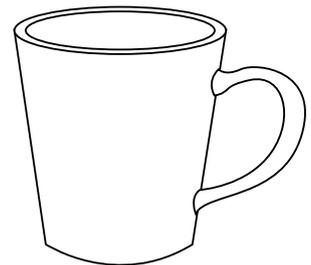
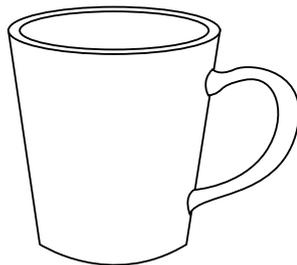
There are pastries altogether.

Worksheet 42

Colour 3 cups red. Colour the rest blue. Fill in the blanks.



3



red

blue

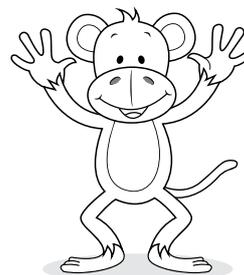
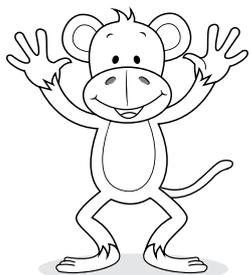
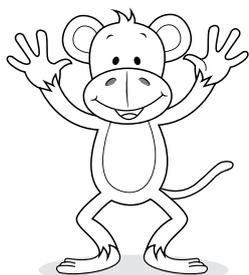
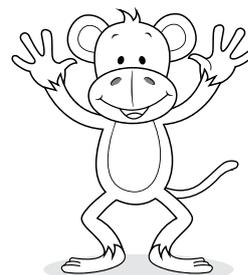
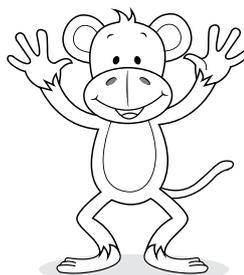
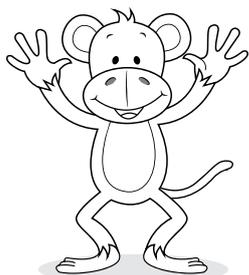
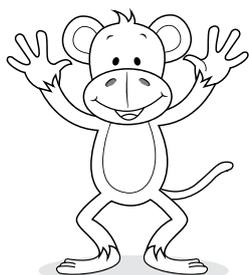
$$\underline{\quad\quad} - 3 = \underline{\quad\quad}$$

There are more blue cups than red cups.

Worksheet 43

Fill in the blanks.

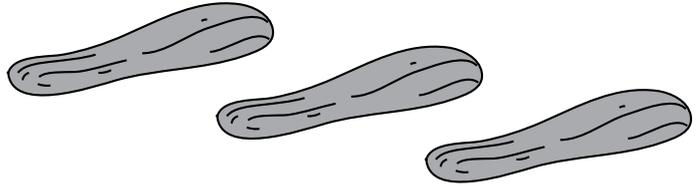
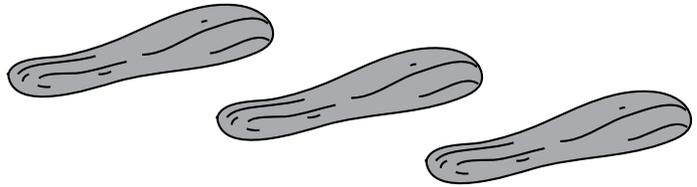
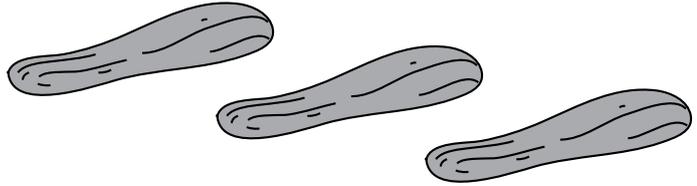
7 monkeys are dancing.
3 monkeys tumbled away.
How many monkeys are left?



$$\underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad}$$

Worksheet 44

Count to fill in the blanks.

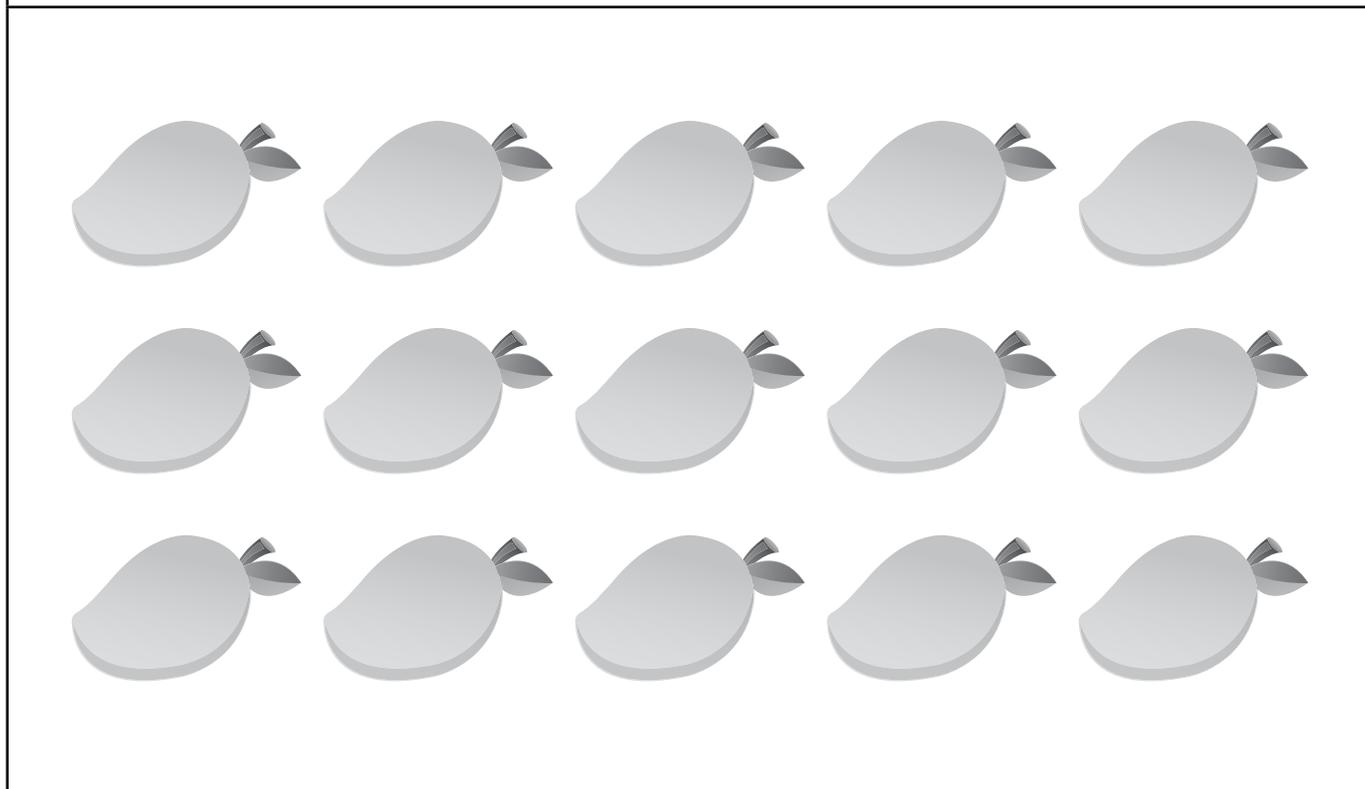
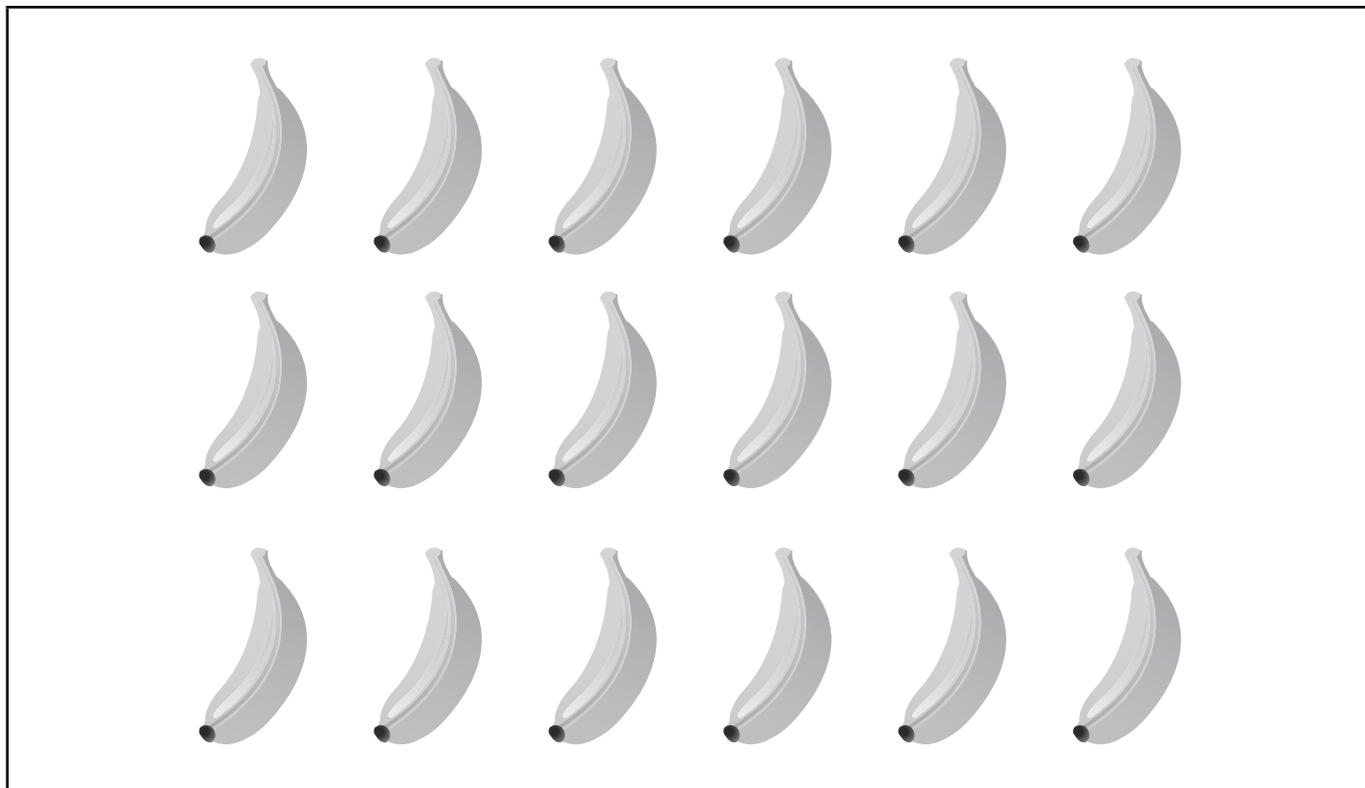


$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are vegetables altogether.

Worksheet 45

Circle groups of 3 in each set.



Worksheet 46

Count from the bottom and colour accordingly.

Colour the fifth light pink.

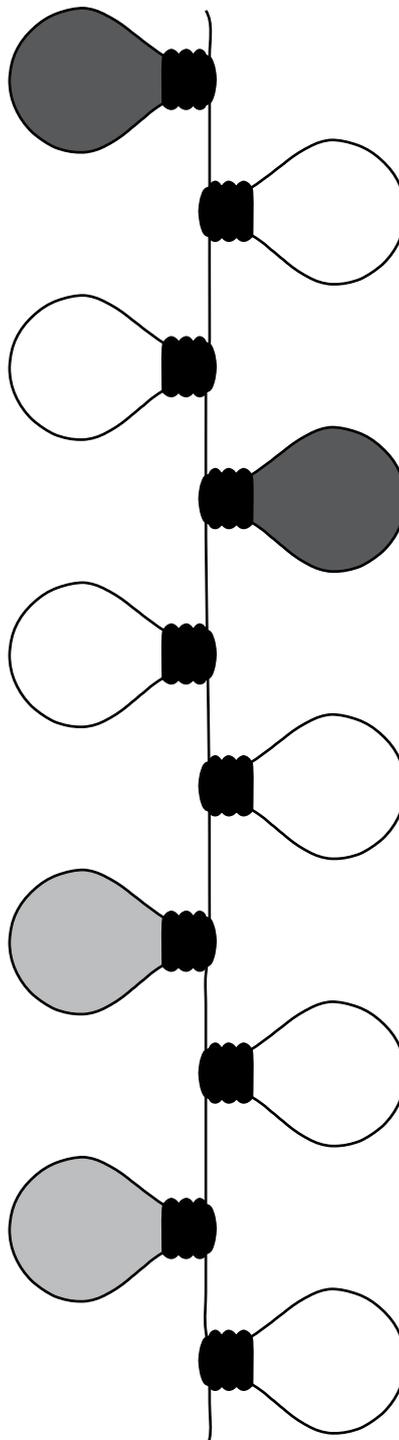
Colour the third light yellow.

Colour the eighth light green.

Colour the first light gray.

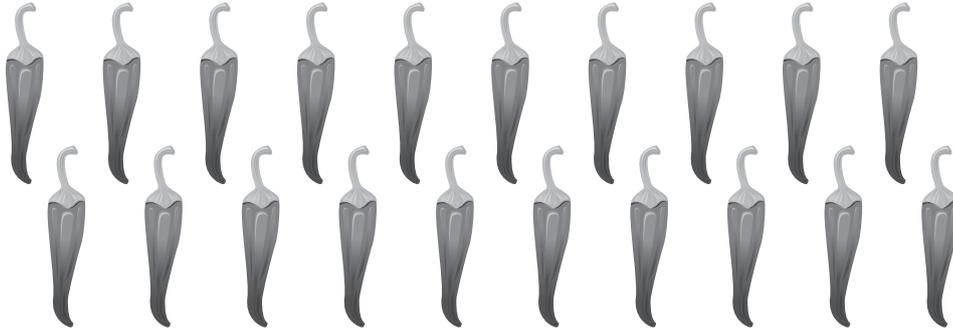
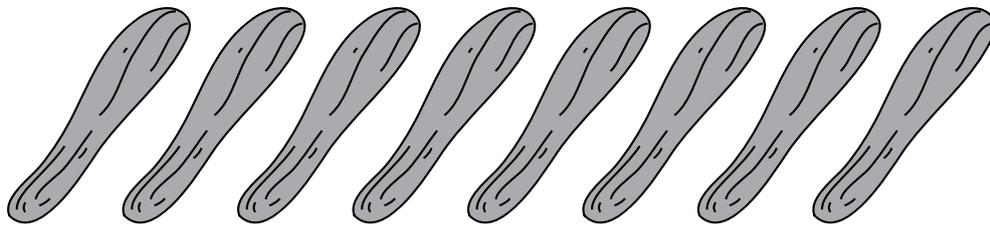
Colour the ninth light black.

Colour the sixth light beige.



Worksheet 47

Count and write 'first' to 'fourth' starting with the fewest.

	<input type="text"/>
	<input type="text"/>
	<input type="text"/>
	<input type="text"/>

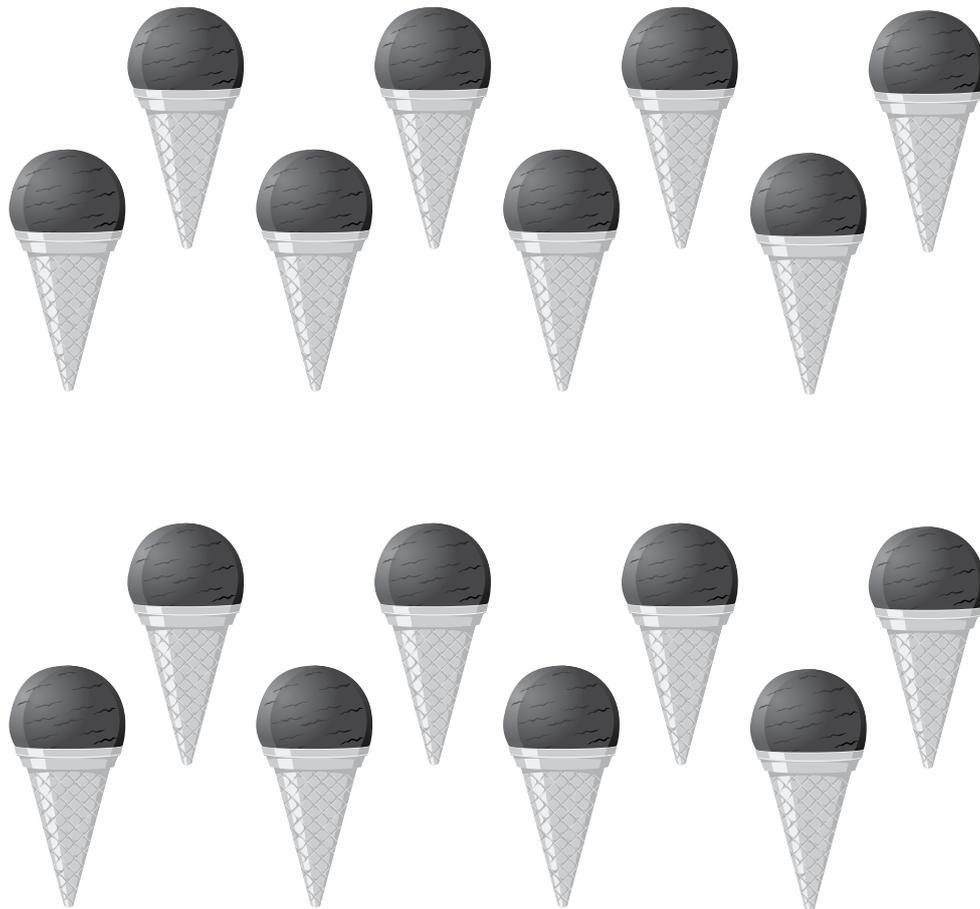
Worksheet 48

The jug can hold 8 cups of water. Draw the correct number of cups.



Worksheet 49

Cross (X) out 8. Fill in the blanks.

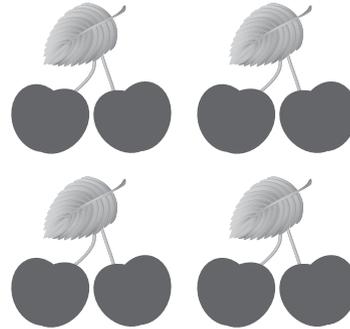
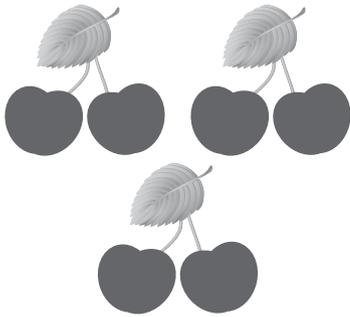


$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

 ice creams are left.

Worksheet 50

Count the pairs, add and complete the addition sentences.



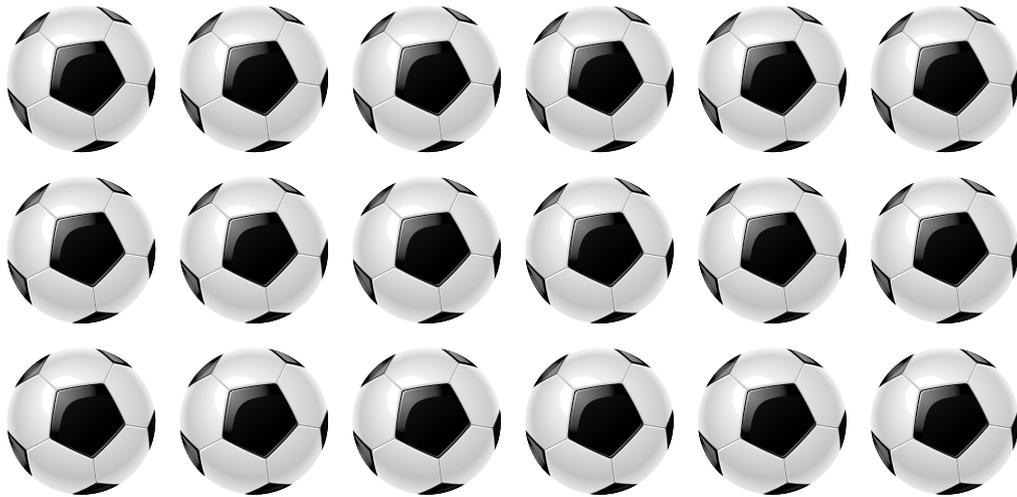
$$\underline{\quad} \text{ pairs} + \underline{\quad} \text{ pairs} = \underline{\quad} \text{ pairs}$$



$$\underline{\quad} \text{ pairs} + \underline{\quad} \text{ pairs} = \underline{\quad} \text{ pairs}$$

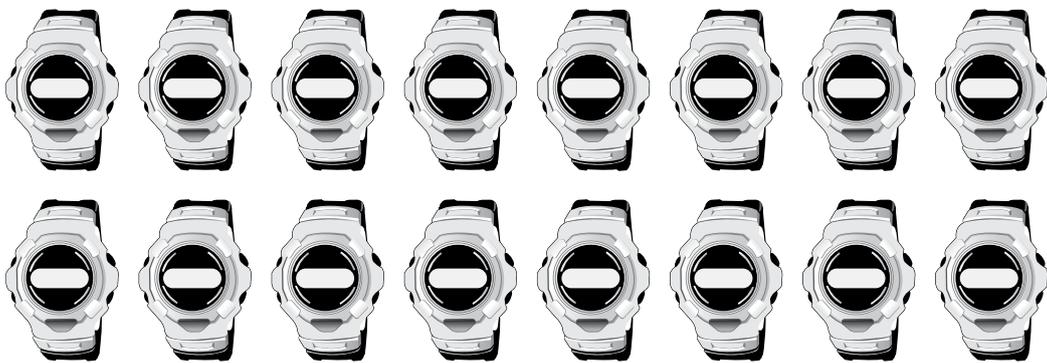
Worksheet 51

Circle 10 of each item and write the addition sentence.
Write the total number.



$$10 + \underline{\quad} = \underline{\quad}$$

There are altogether.

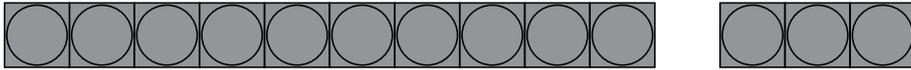


$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

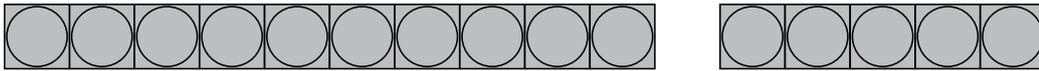
There are altogether.

Worksheet 52

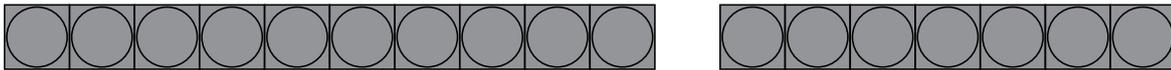
Count and write the total number.



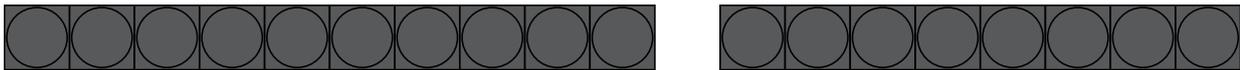
10 and ____ make ____.



10 and ____ make ____.



10 and ____ make ____.



10 and ____ make ____.



10 and ____ make ____.

Worksheet 53

Add to write the answer.



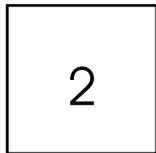
$$0 + \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + 0 = \underline{\quad}$$

Worksheet 54

Colour, then count and complete the subtraction sentence.



red



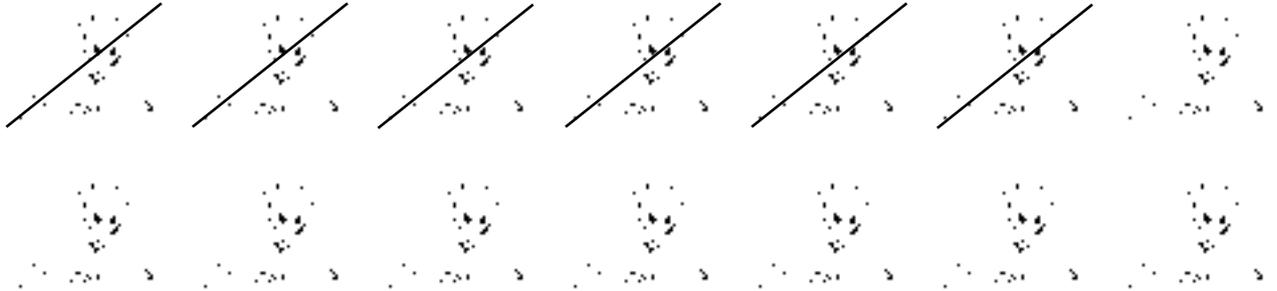
blue

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

There are blue cups.

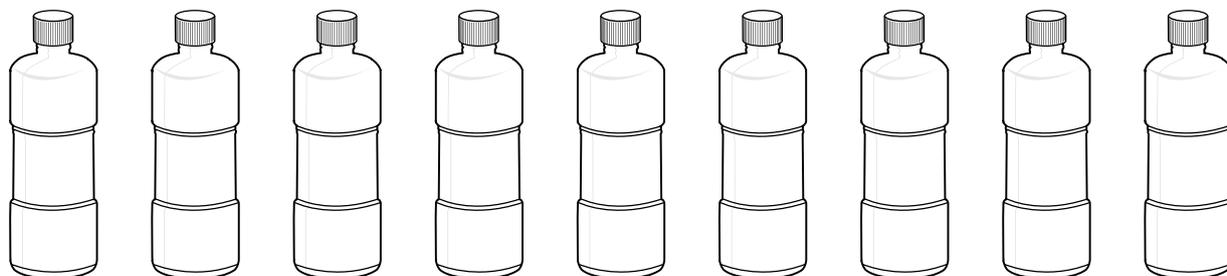
Worksheet 55

Cross (X) out and complete the number sentences.

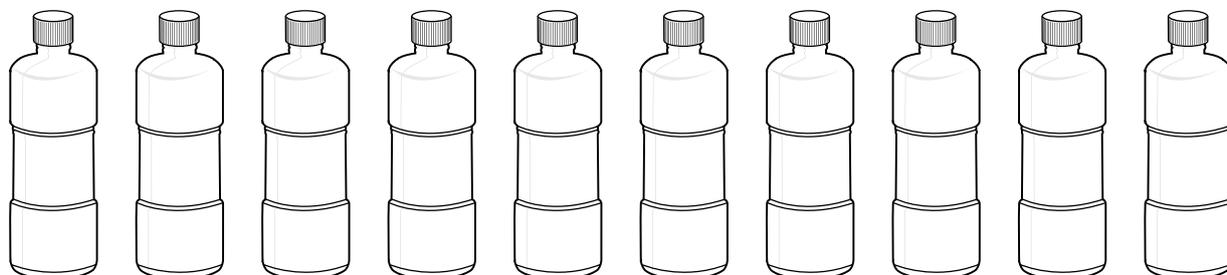
 <p>14 - <u> </u> = <u> </u></p>
 <p><u> </u> - 8 = <u> </u></p>
 <p><u> </u> - 10 = <u> </u></p>

Worksheet 56

Cross (X) out and complete the number sentences.



$$9 - 4 = \underline{\quad}$$



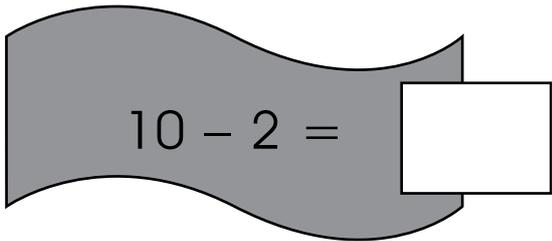
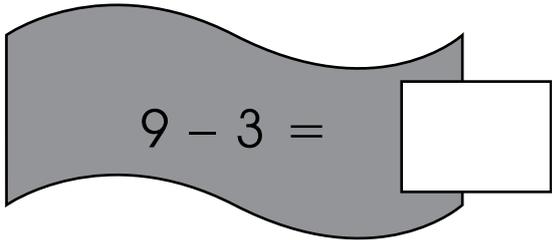
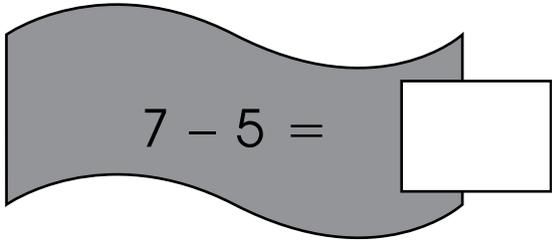
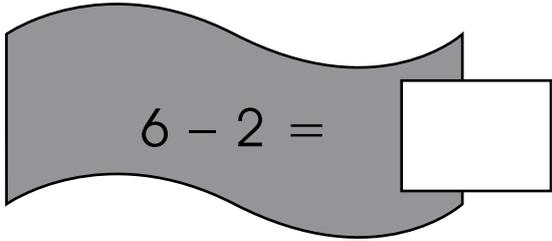
$$10 - 5 = \underline{\quad}$$



$$15 - 7 = \underline{\quad}$$

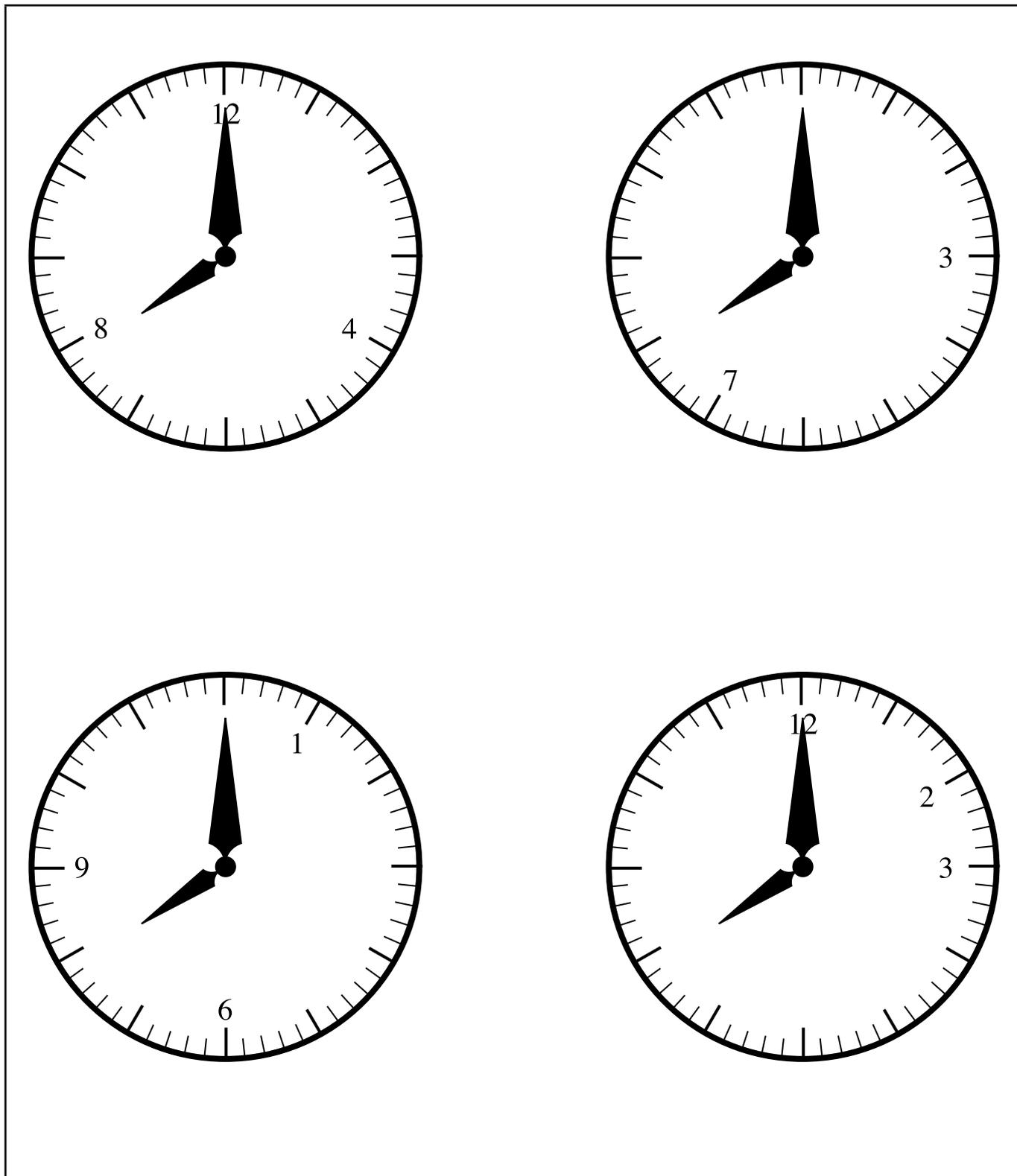
Worksheet 57

Solve each. On the right hand side, write another subtraction sentence with the same answer.

 $10 - 2 =$	
 $9 - 3 =$	
 $7 - 5 =$	
 $6 - 2 =$	

Worksheet 58

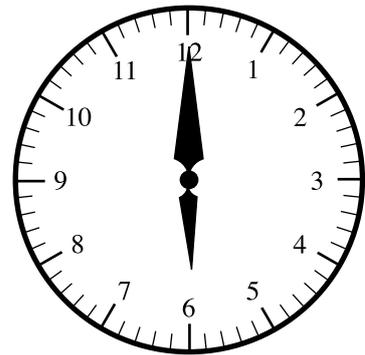
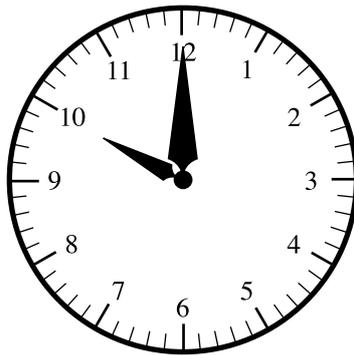
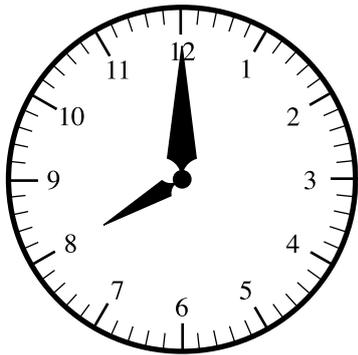
Write the missing numbers on the clocks.



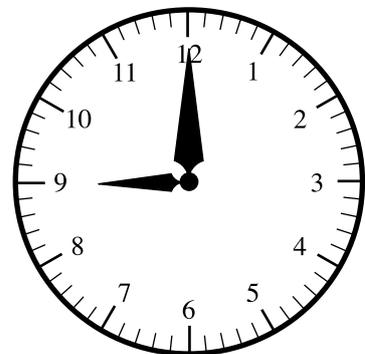
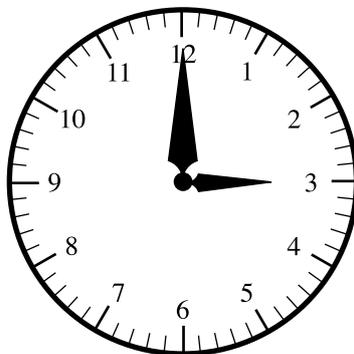
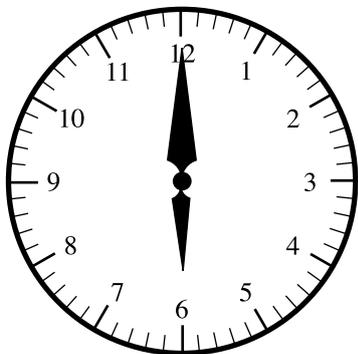
Worksheet 59

Circle the clocks showing the times written.

10 o'clock

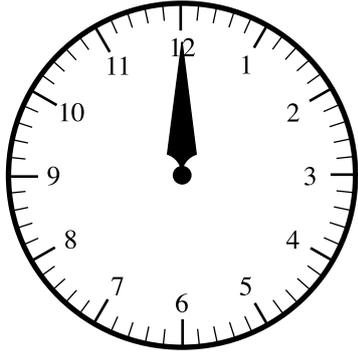


6 o'clock

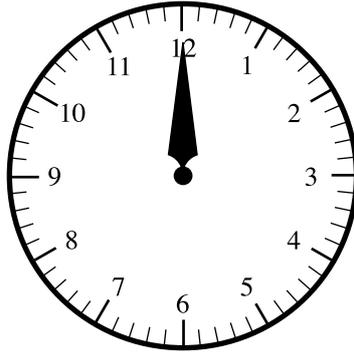


Worksheet 60

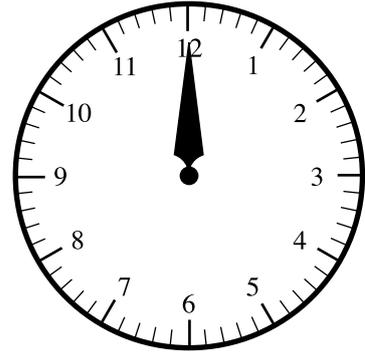
Draw the correct time on the analogue clocks.



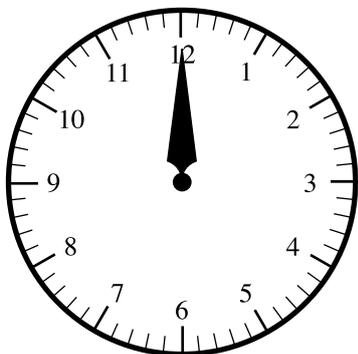
02:00



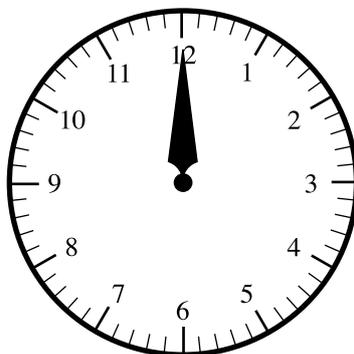
12:00



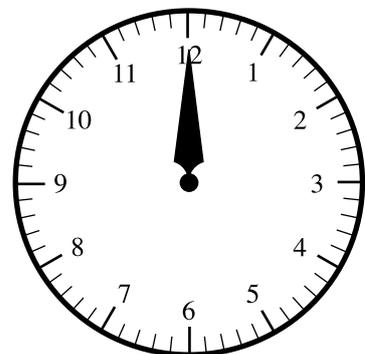
08:00



09:00



06:00



01:00

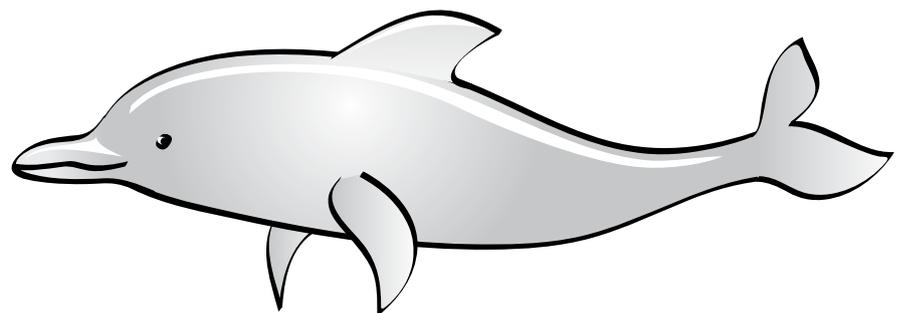
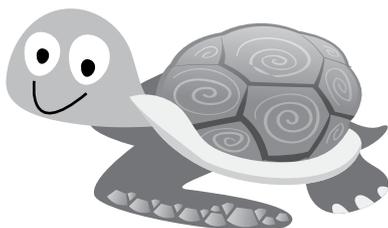
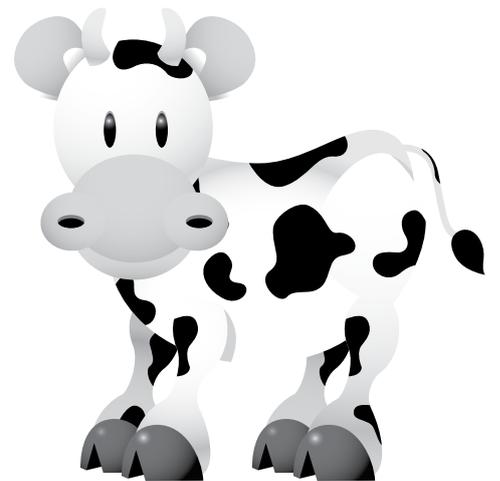
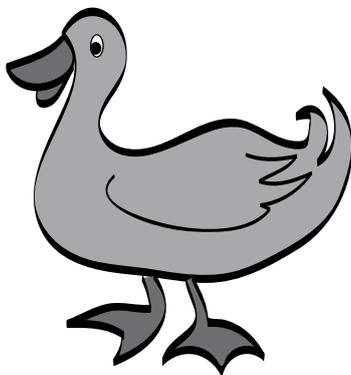
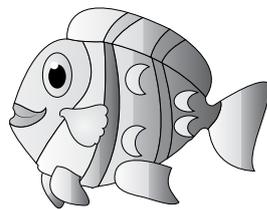
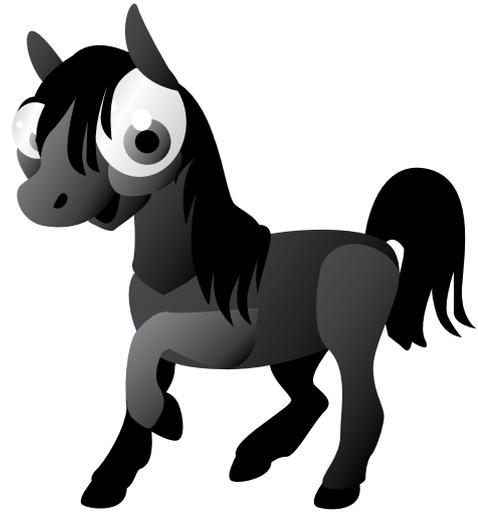
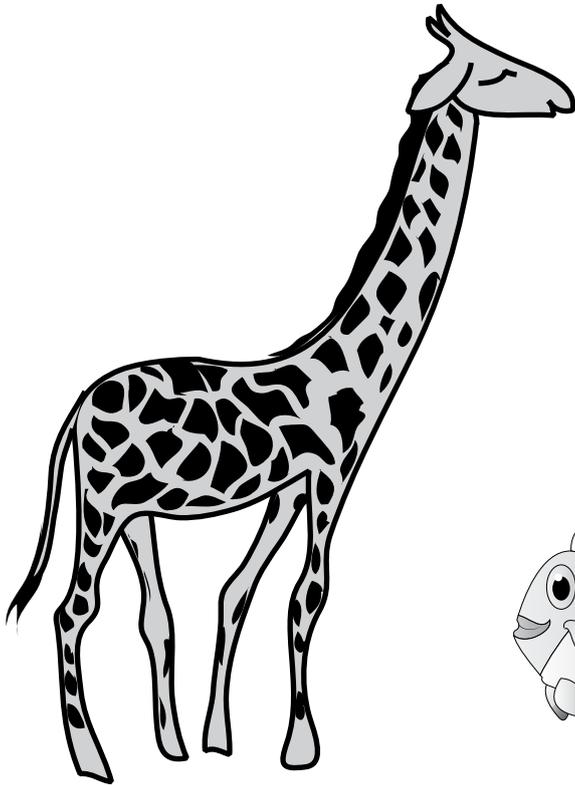
Worksheet 61

Complete any calendar month with its name, days, and dates.

Month						

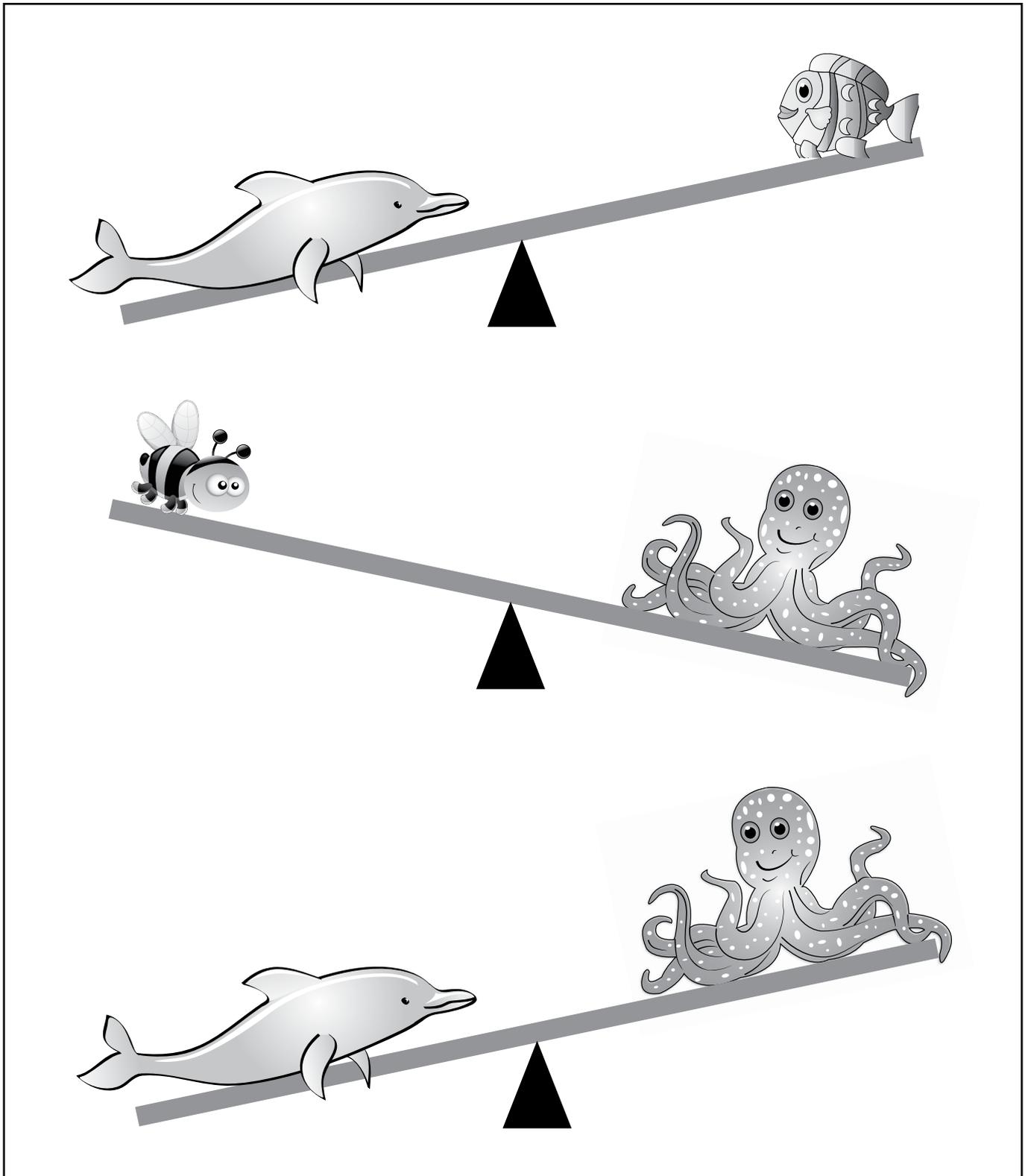
Worksheet 62

Circle the heavier animals. Cross (X) out the lighter ones.



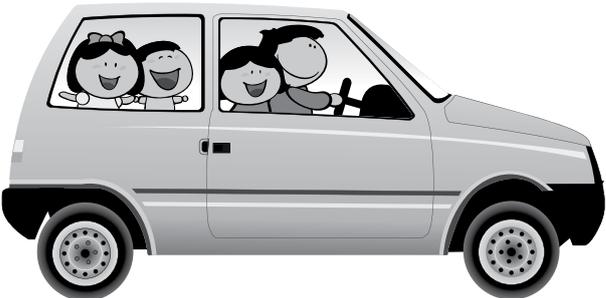
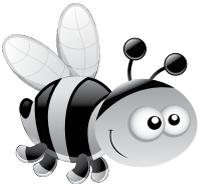
Worksheet 63

Circle the heavier animals. Cross (X) out the lighter ones.



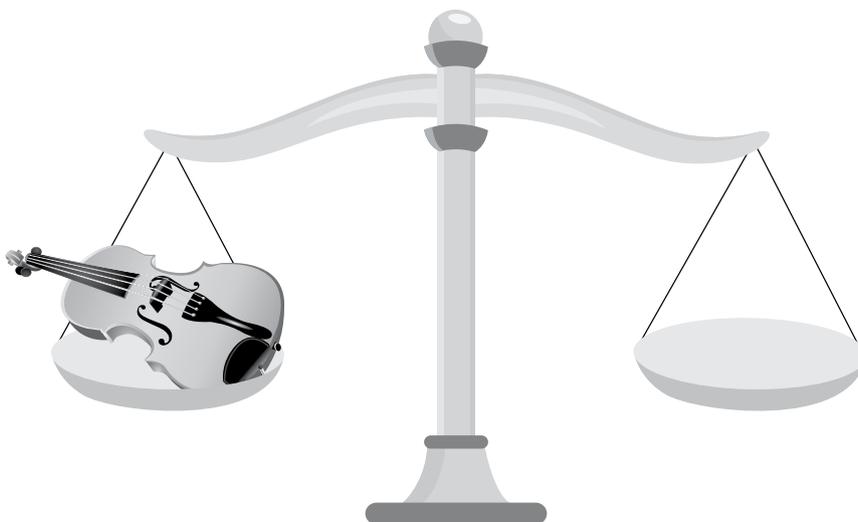
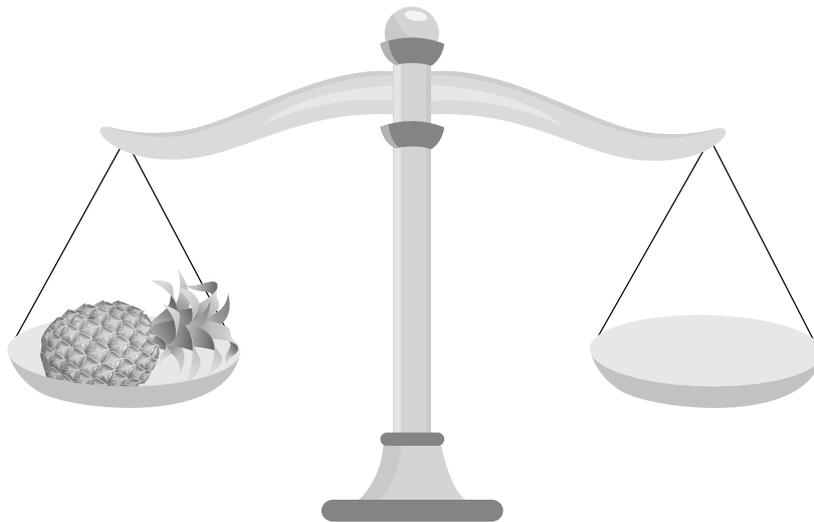
Worksheet 64

Draw lighter/heavier objects.

Lighter	Heavier
	
	
	

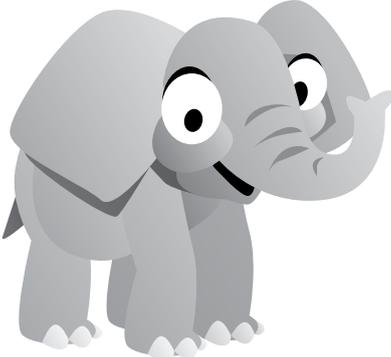
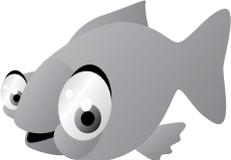
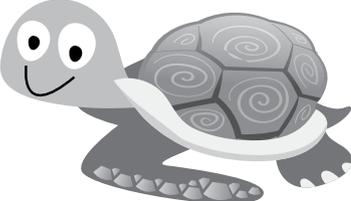
Worksheet 65

Draw non-standard units to balance the objects.



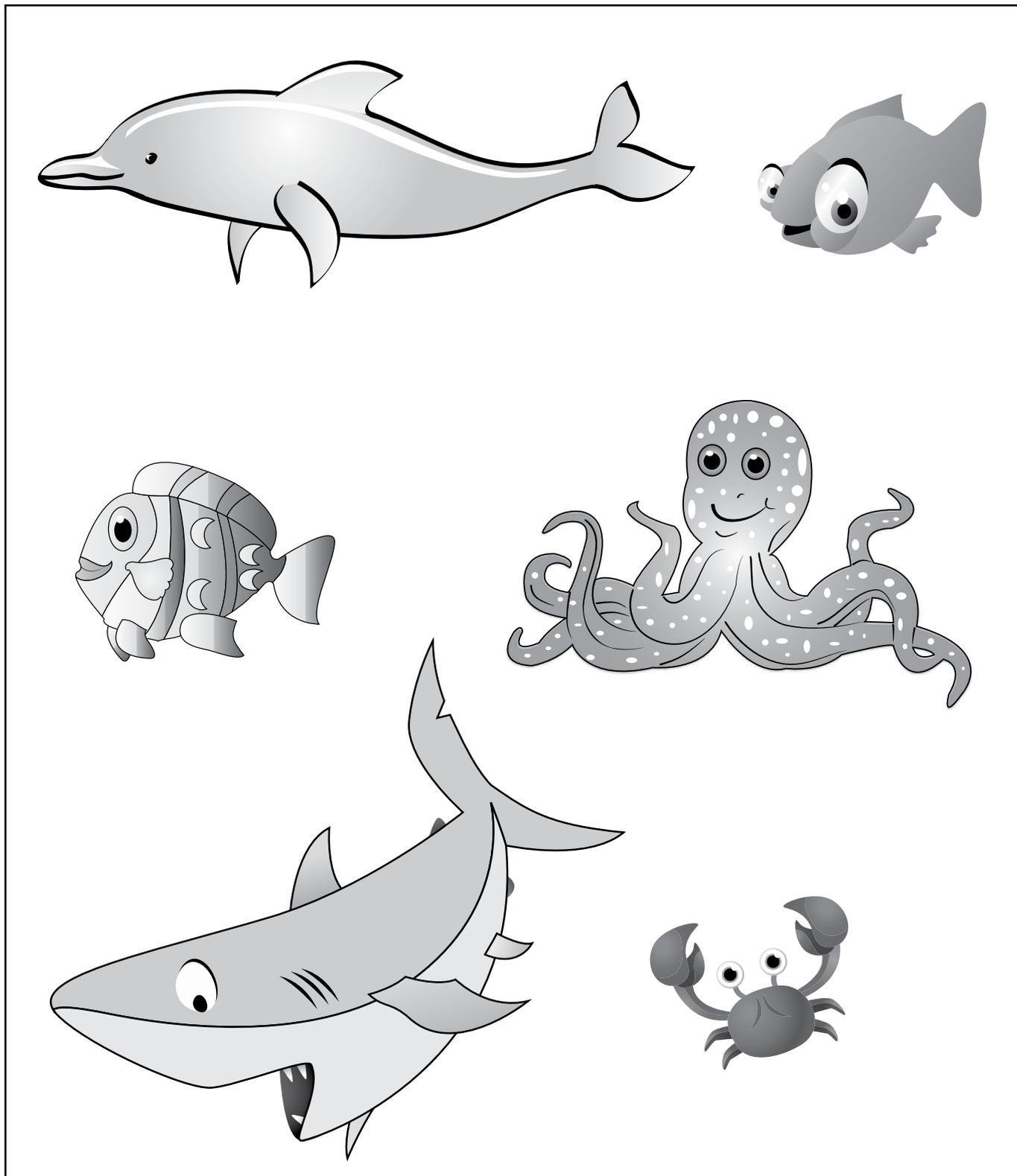
Worksheet 66

Circle the heaviest object in each set.

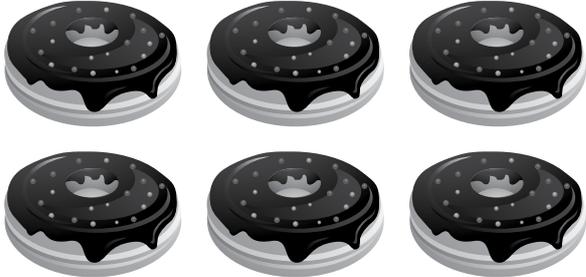
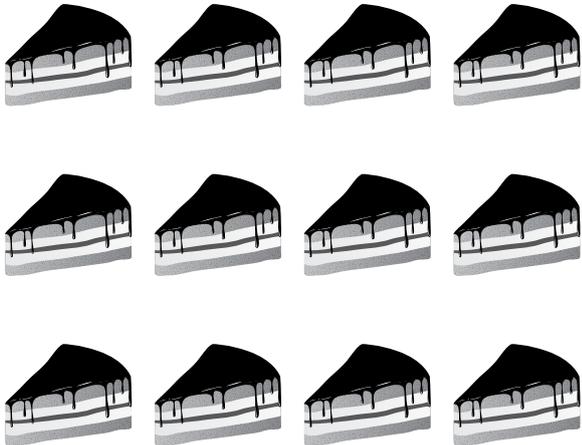
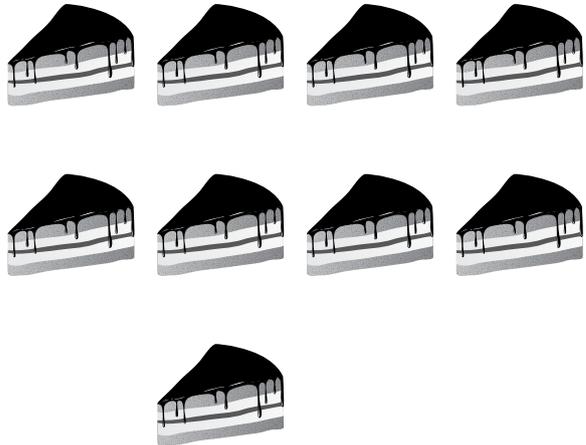
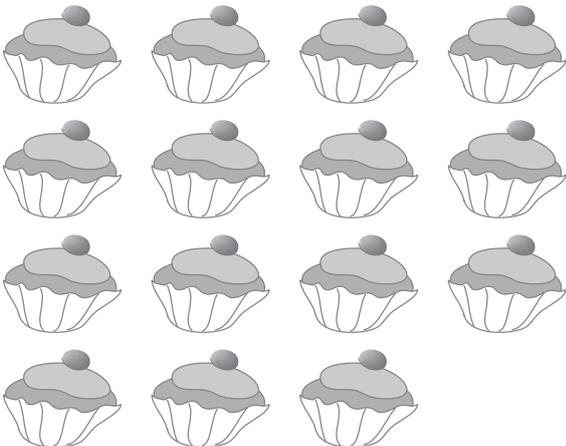
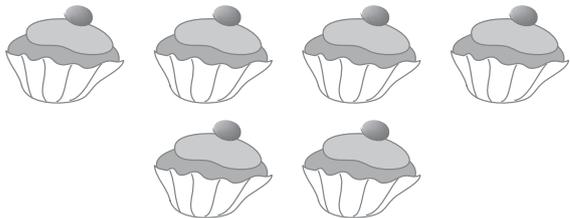
Worksheet 67

Circle the lighter sea animal in each set.



Worksheet 68

Circle in groups of 3. Draw more to equal the two sets.

Worksheet 69

Complete each. Next, match the number sentences with the same answers.

$11 + 8 = \square$

$18 - 2 = \square$

$14 + 2 = \square$

$15 - 0 = \square$

$14 + 3 = \square$

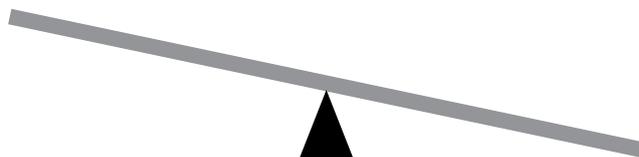
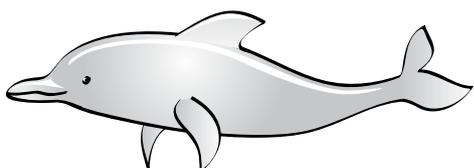
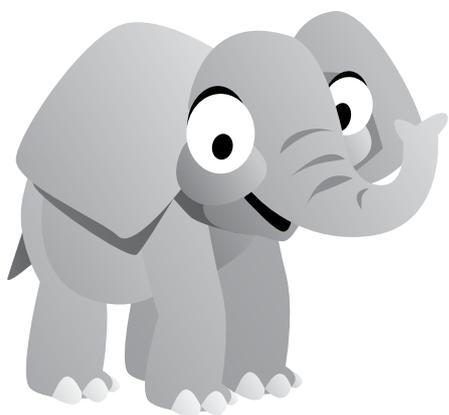
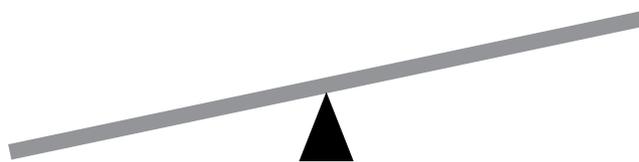
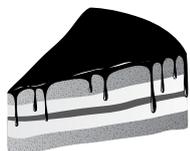
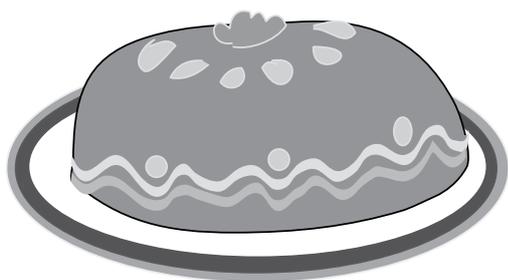
$20 - 1 = \square$

$12 + 3 = \square$

$18 - 1 = \square$

Worksheet 70

Draw these object on the correct side of the balance.



Worksheet 71

Do as the teacher instructs.

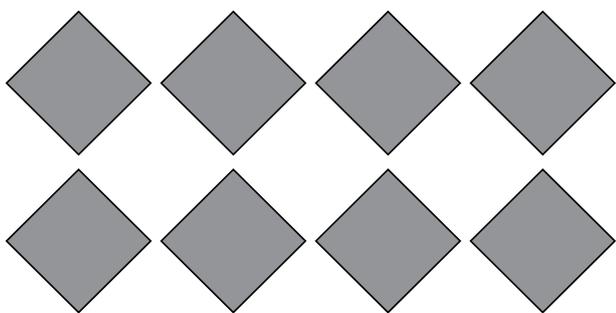


Worksheet 72

Draw more shapes to complete the number sentences.



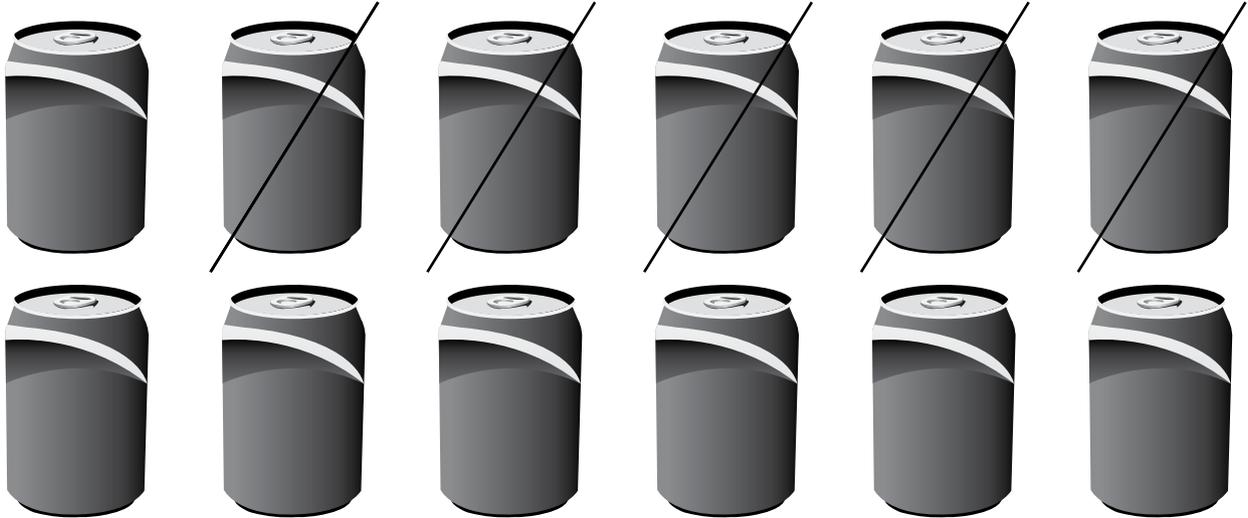
$$\underline{\quad} + \underline{2} = \underline{\quad}$$



$$\underline{\quad} + \underline{4} = \underline{\quad}$$

Worksheet 73

Write the subtraction sentences.



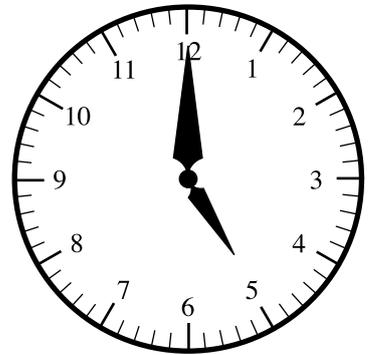
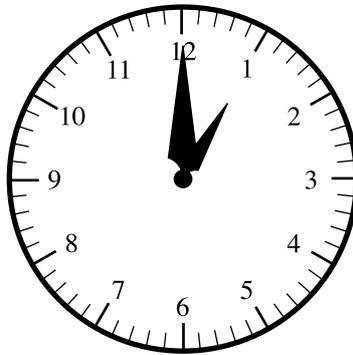
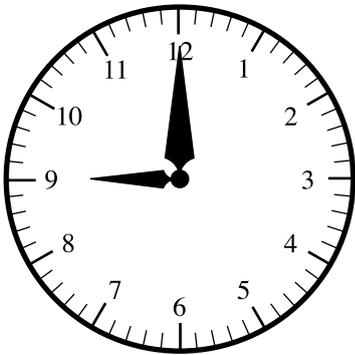
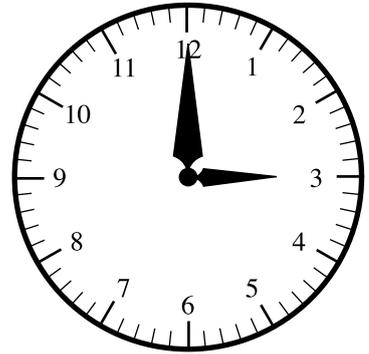
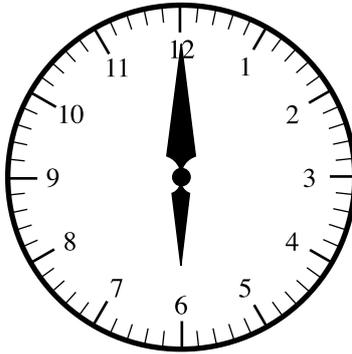
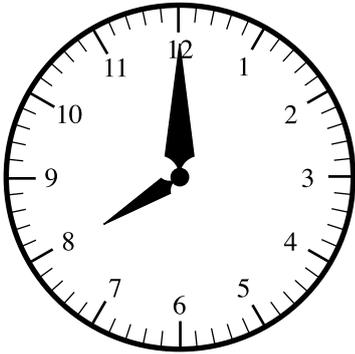
$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

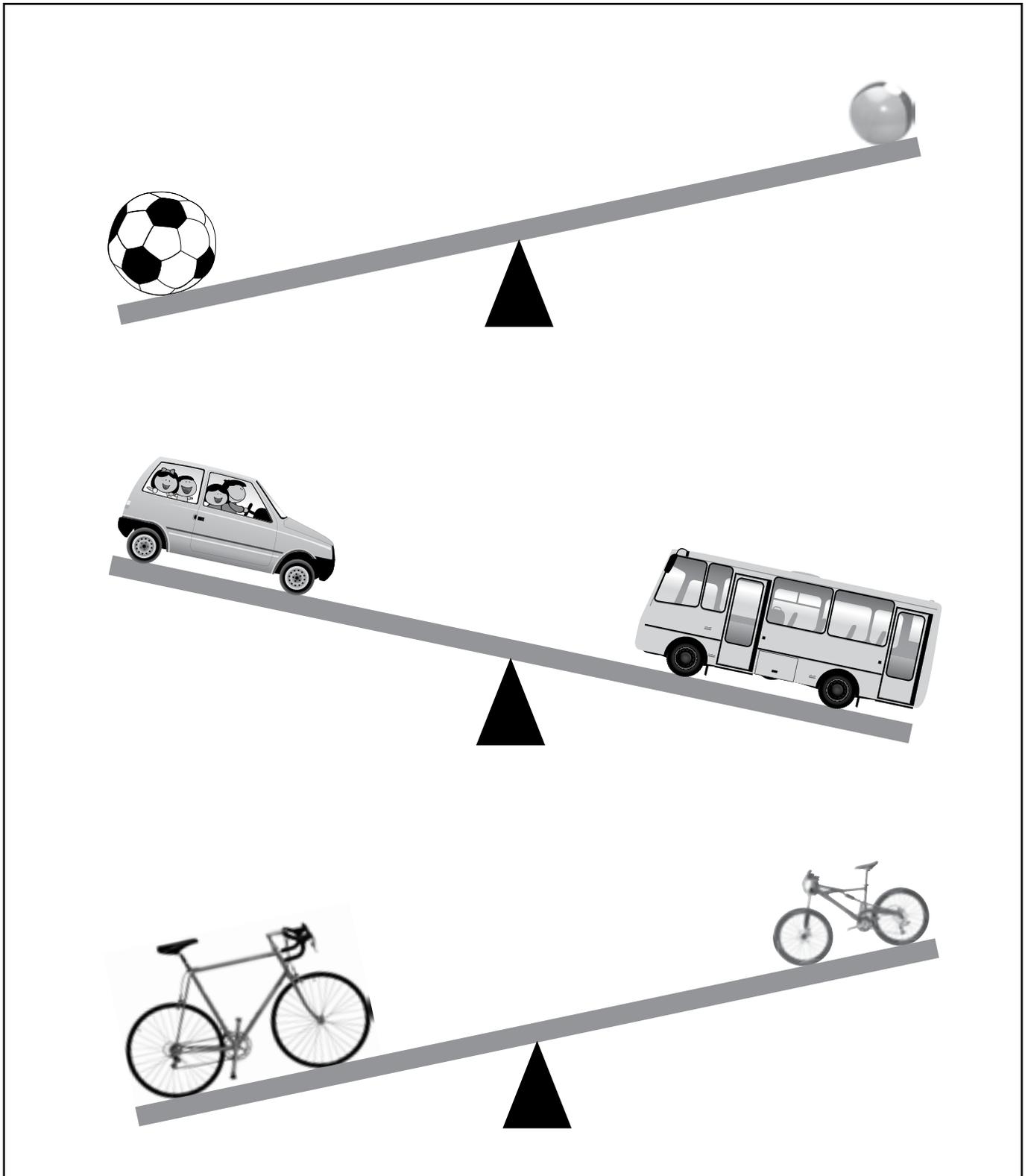
Worksheet 74

Write the time in each box.



Worksheet 75

Circle the heavier object in each pair.



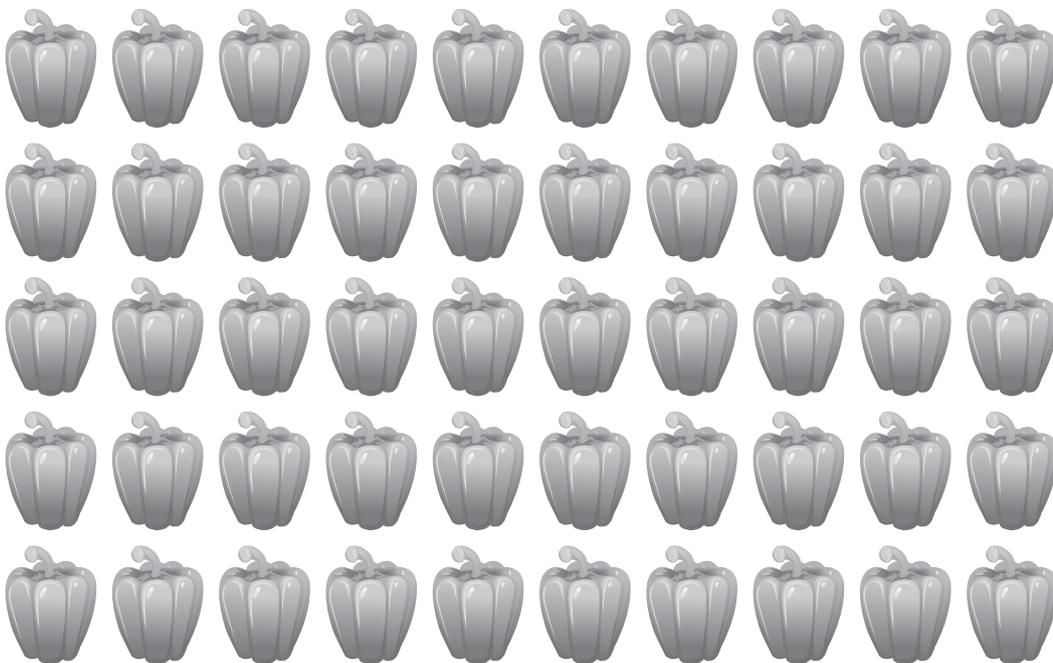
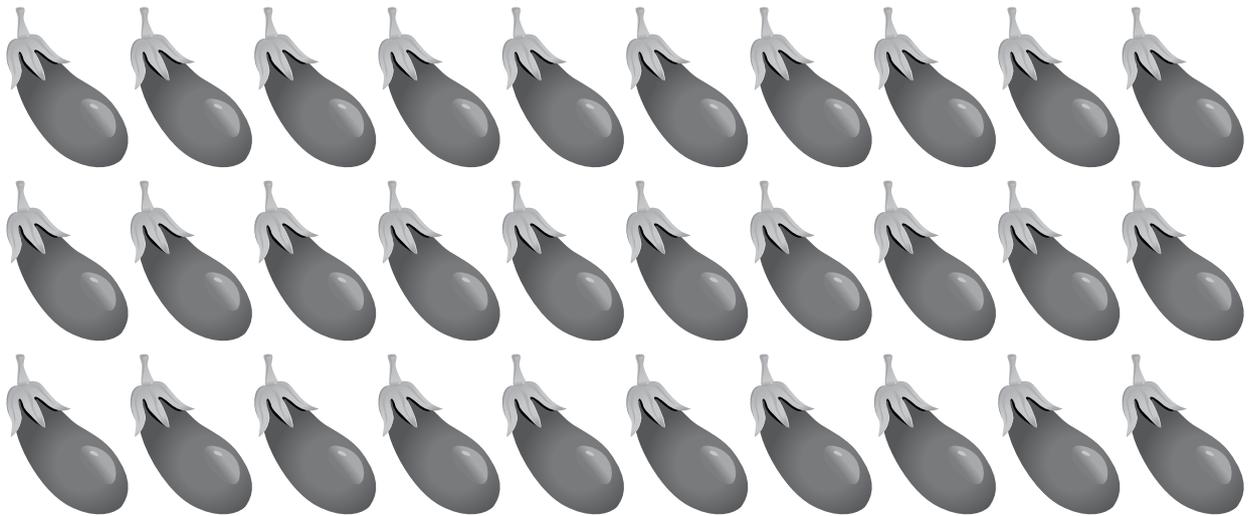
Worksheet 76

Fill in the missing numbers.

1	2		4				8	9	10
11	12	13			16			19	
	22	23		25		27	28		30
31			34				38	39	
	42	43	44	45		47	48		

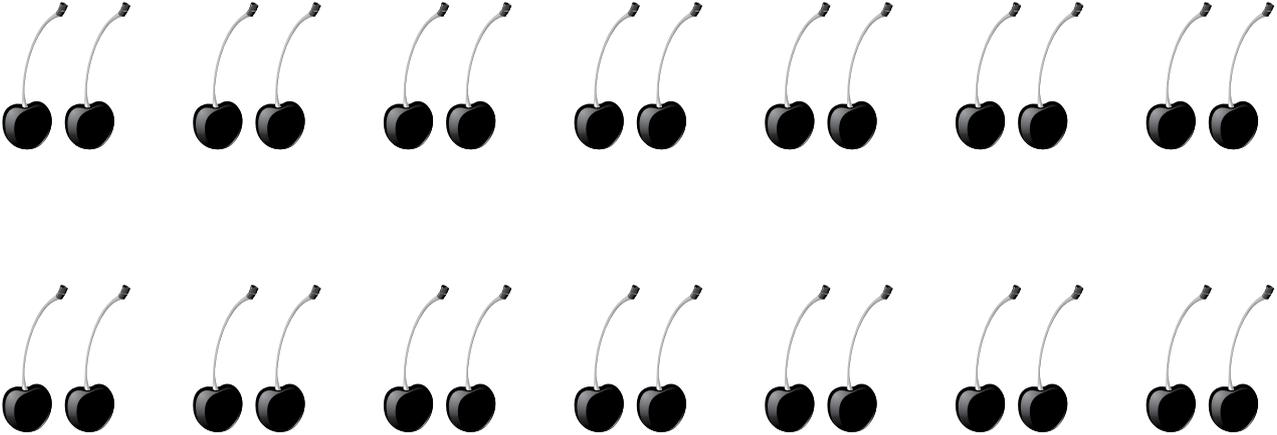
Worksheet 77

Count and write the numbers.



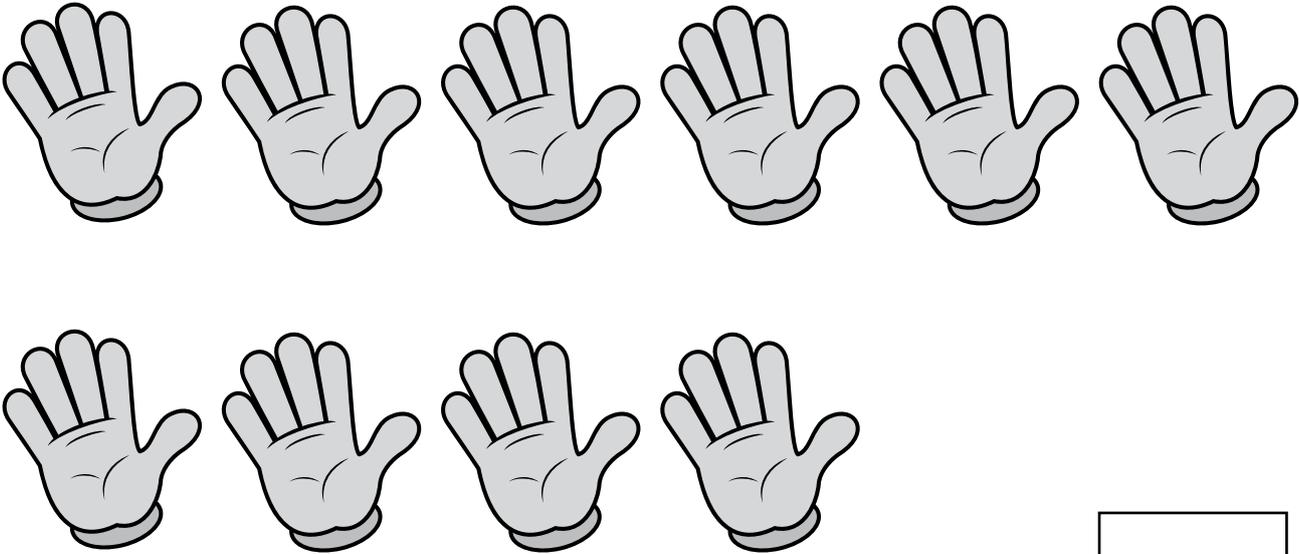
Worksheet 78

Count in 2s and write the number.



Two rows of pairs of cherries. Each row contains seven pairs of cherries, for a total of 14 pairs. In the bottom right corner of the box, there is an empty rectangular box for writing the answer.

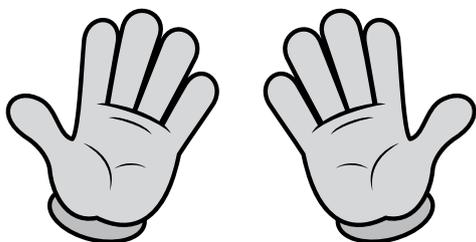
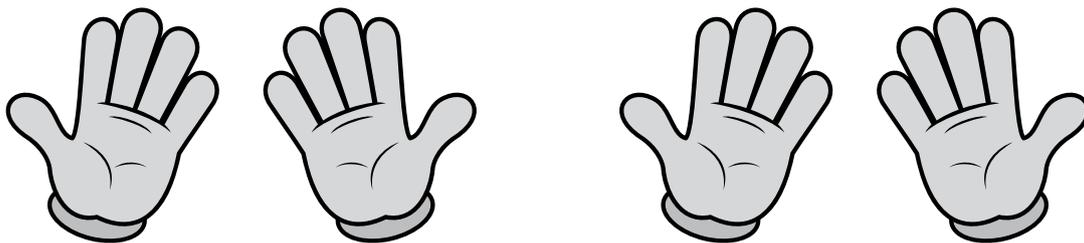
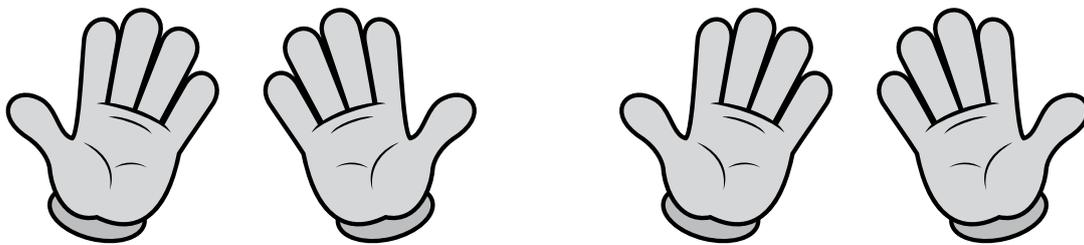
Count in 5s and write the number.



Two rows of hands. The top row contains six hands, and the bottom row contains four hands, for a total of 10 hands. In the bottom right corner of the box, there is an empty rectangular box for writing the answer.

Worksheet 79

Count in 10s and write the number.



Worksheet 80

Fill in the missing numbers.

51	52	53					58		60
61		63	64	65	66			69	
	72			75			78	79	
	82	83			86		88	89	90
	92		94	95		97	98		100

Worksheet 81

Fill in the missing numbers or number words.

0 _____ 20 _____

_____ ten _____ thirty

_____ 60 50 _____

_____ _____ forty

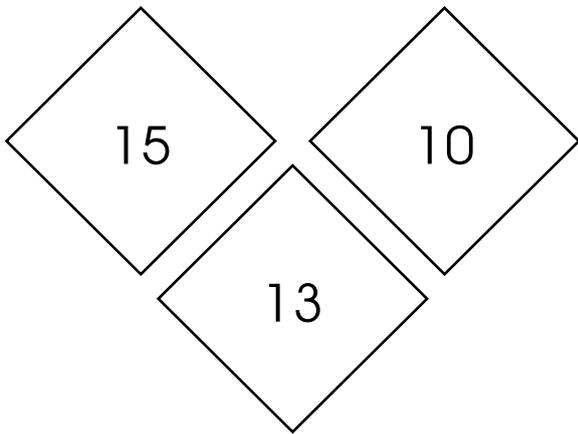
70 _____ 90 100

_____ eighty _____ _____

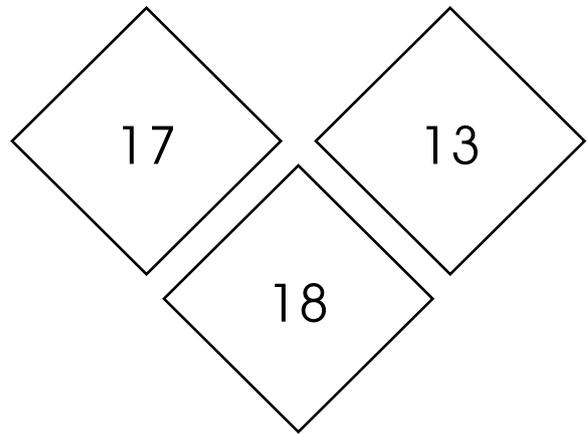
Worksheet 82

Add and colour the correct number.

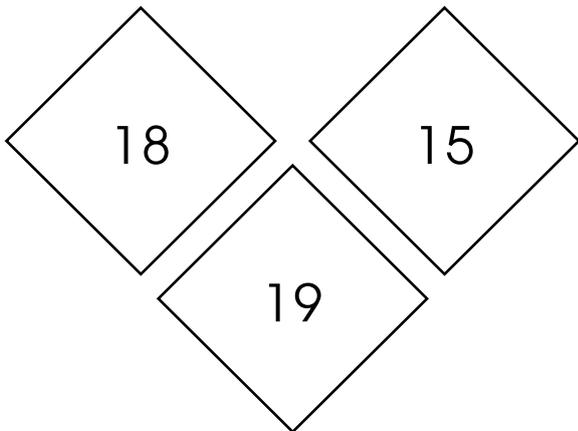
$$10 + 5 = \underline{\quad}$$



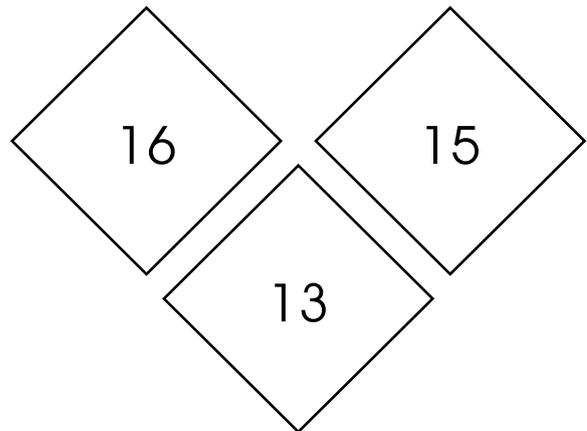
$$13 + 5 = \underline{\quad}$$



$$11 + 8 = \underline{\quad}$$

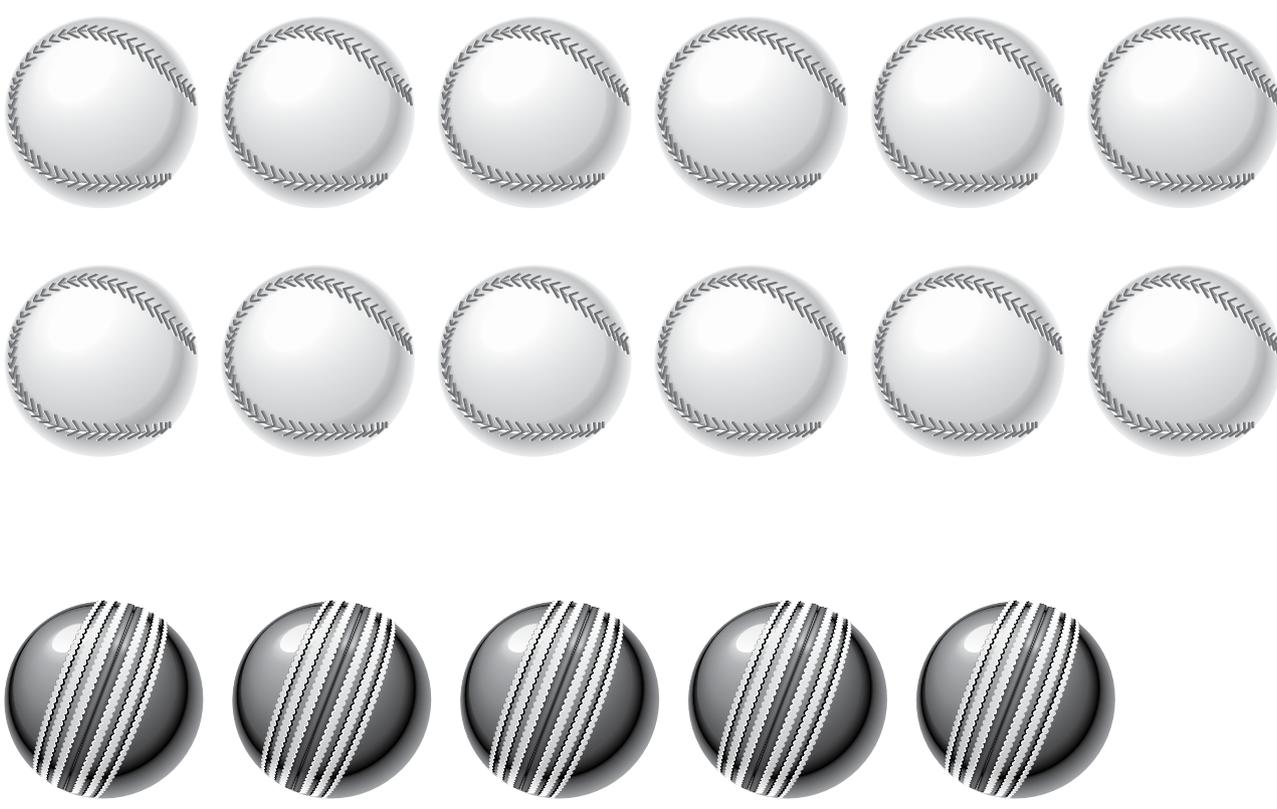


$$9 + 7 = \underline{\quad}$$



Worksheet 83

Solve the vertical addition sentence.



The image shows a collection of 17 balls arranged in three rows. The first two rows each contain 6 baseballs, and the third row contains 5 cricket balls. Below the balls is a vertical addition problem with empty boxes for the numbers and lines for the result.

How many balls are there altogether?

$$\begin{array}{r} \square \quad \square \\ + \quad \square \\ \hline \hline \end{array}$$

Worksheet 84

Subtract and colour the correct answers.

$$10 - 5 = \underline{\quad}$$

5
7
8

$$13 - 8 = \underline{\quad}$$

5
9
10

$$16 - 3 = \underline{\quad}$$

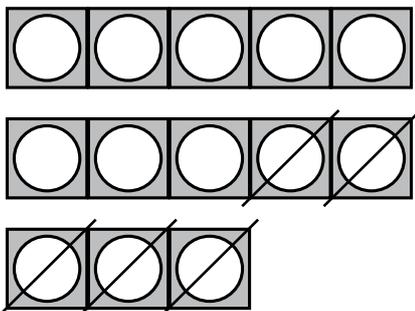
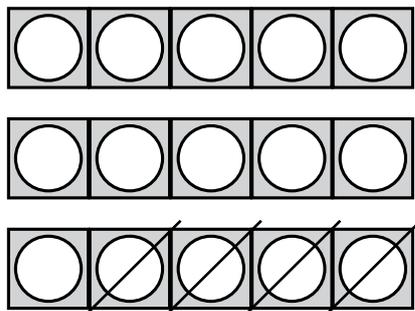
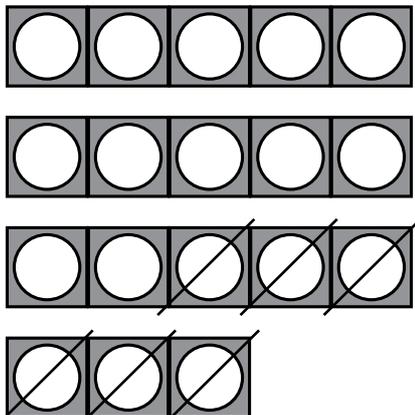
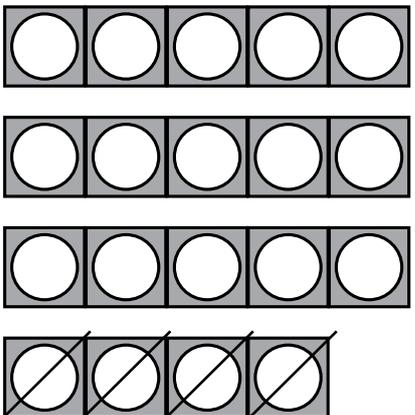
15
17
13

$$19 - 7 = \underline{\quad}$$

11
12
13

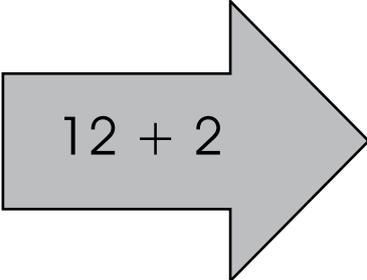
Worksheet 85

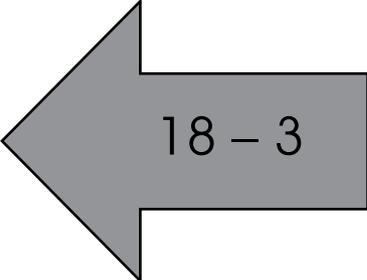
Write and solve the vertical subtraction sentences.

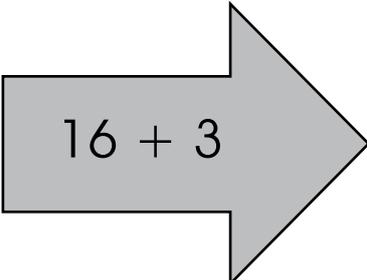
 $ \begin{array}{r} 13 \\ - 5 \\ \hline 8 \end{array} $	 $ \begin{array}{r} \\ - \\ \hline \\ \hline \end{array} $
 $ \begin{array}{r} \\ \\ \hline \\ \hline \end{array} $	 $ \begin{array}{r} \\ \\ \hline \\ \hline \end{array} $

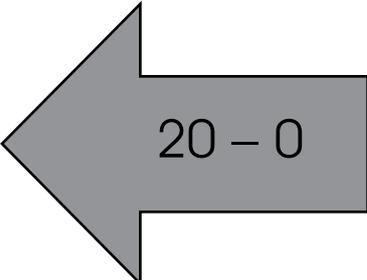
Worksheet 86

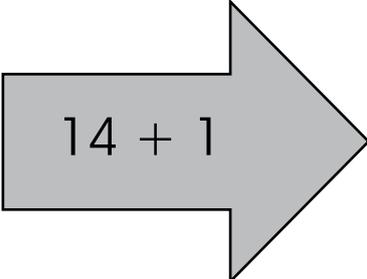
Add or subtract. Match the sums with the same answers.

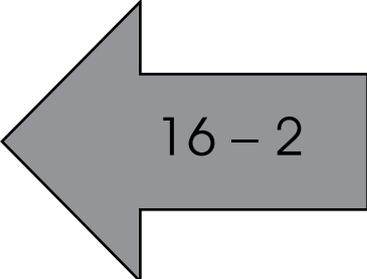
 $12 + 2$

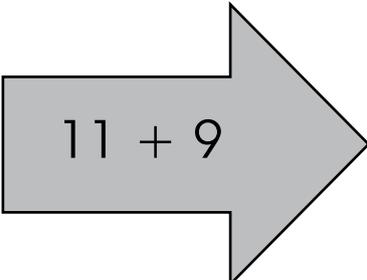
 $18 - 3$

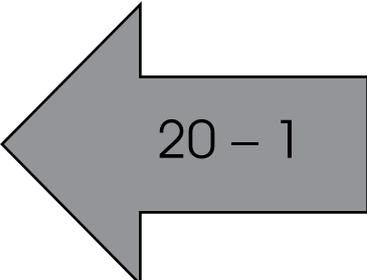
 $16 + 3$

 $20 - 0$

 $14 + 1$

 $16 - 2$

 $11 + 9$

 $20 - 1$

Worksheet 87

Fill in the missing signs or numbers.

Row 1: 15, , 3, =, 12

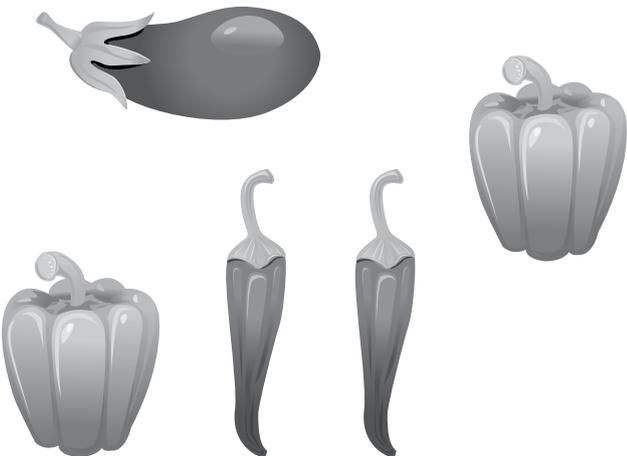
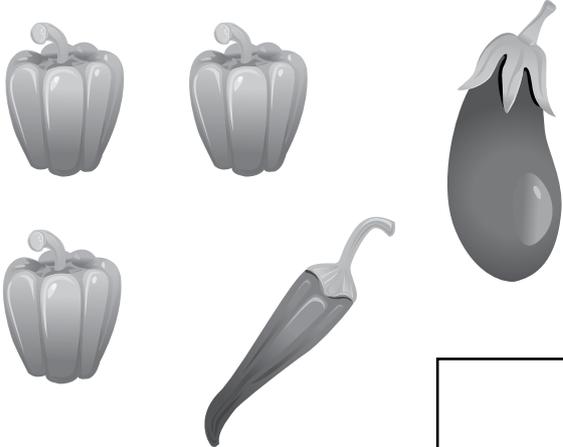
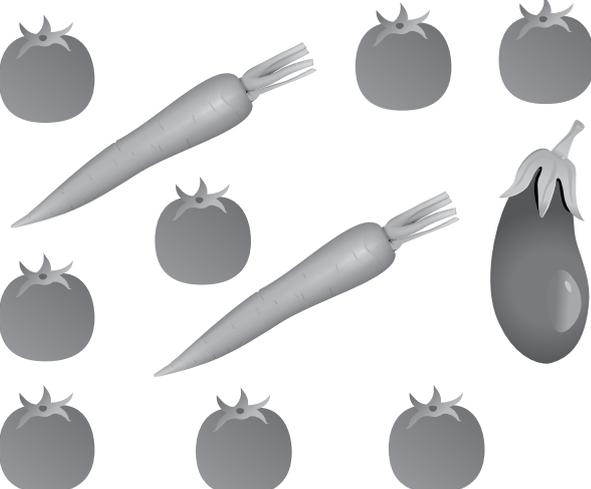
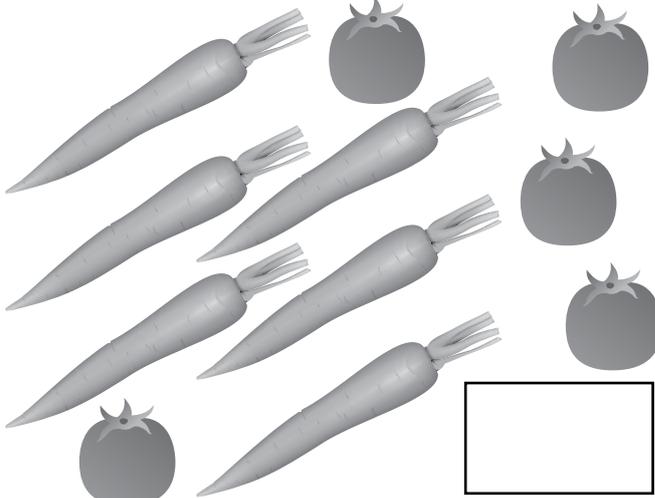
Row 2: , +, 8, =, 18

Row 3: 20, , 3, =, 17

Row 4: 11, +, , =, 19

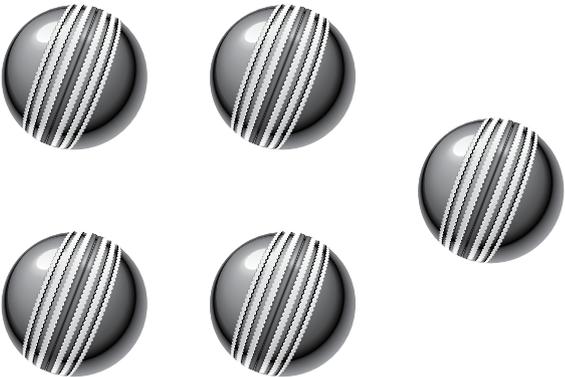
Worksheet 88

Tick the set with the same number of vegetables.

 <p>1 eggplant, 1 bell pepper, 2 chili peppers, 1 bell pepper.</p>	 <p>2 bell peppers, 1 eggplant, 1 bell pepper, 1 chili pepper.</p> <input data-bbox="1268 735 1460 845" type="checkbox"/>
 <p>3 chili peppers, 3 carrots.</p>	 <p>1 bell pepper, 3 carrots, 2 chili peppers.</p> <input data-bbox="1268 1259 1460 1369" type="checkbox"/>
 <p>5 tomatoes, 2 carrots, 1 eggplant.</p>	 <p>5 carrots, 5 tomatoes.</p> <input data-bbox="1268 1786 1460 1895" type="checkbox"/>

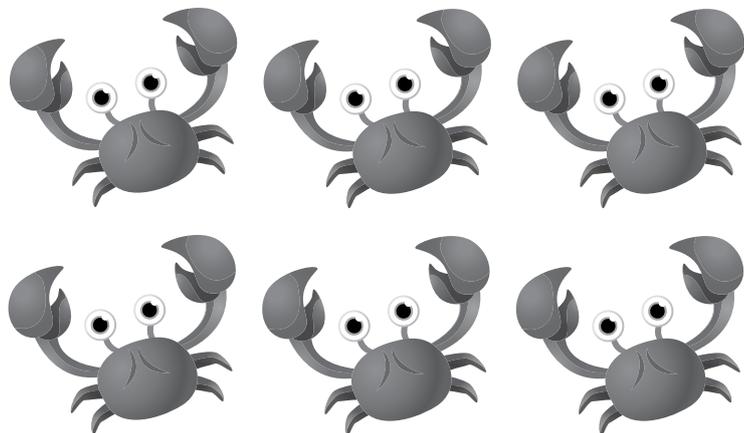
Worksheet 89

Draw more equal sets.

Worksheet 90

Count and fill in the blanks.



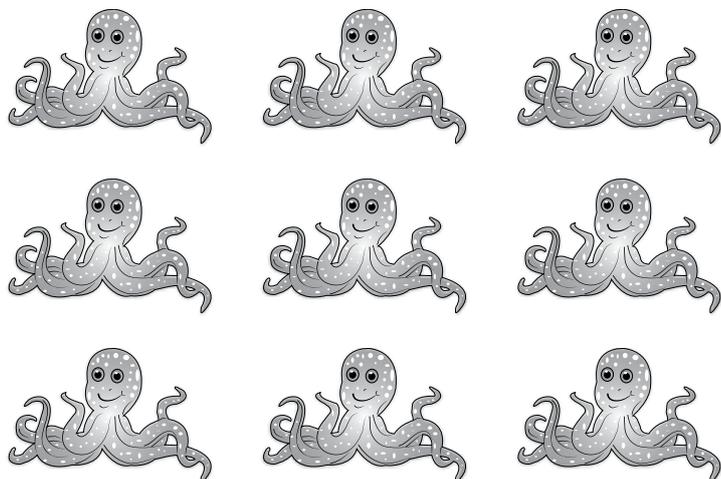
There are 3 groups.

There are _____

in each group.

$$2 + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are _____ crabs altogether.



There are _____

groups.

There are _____

in each group.

$$3 + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are _____ octopuses altogether.

Worksheet 91

Count and fill in the blanks.

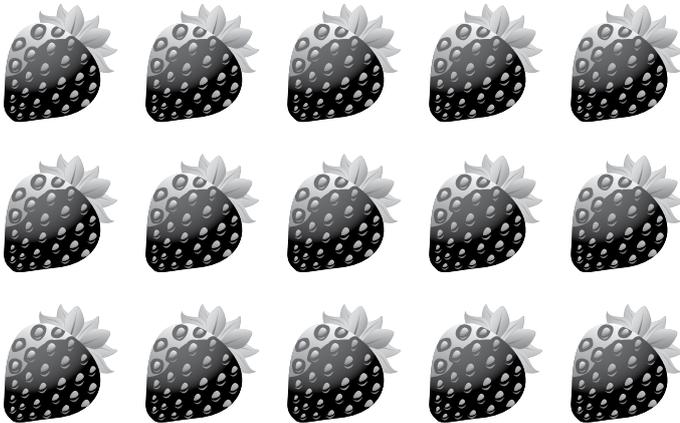


There are 2 groups.

There are ____ in each group.

$$3 + \underline{\quad} = \underline{\quad}$$

There are ____ pears altogether.



There are ____ groups.

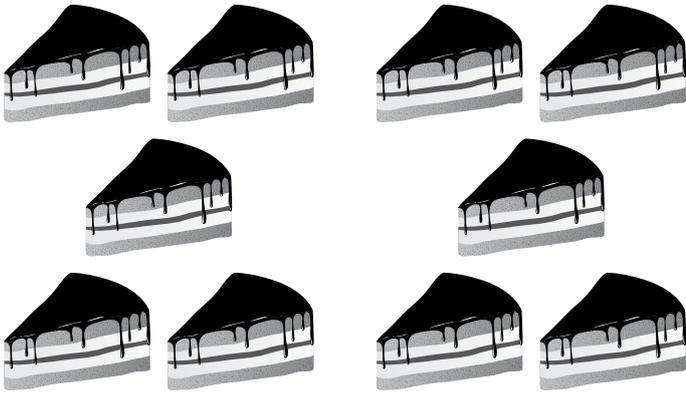
There are ____ in each group.

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

There are ____ strawberries altogether.

Worksheet 92

Count and fill in the blanks.

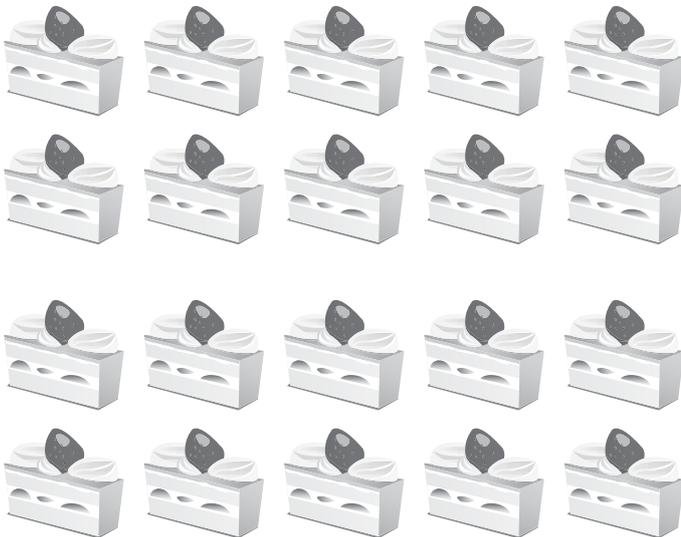


There are ____ groups.

There are ____ in each group.

$$5 + \underline{\quad} = \underline{\quad}$$

There are ____ pastries altogether.



There are ____ groups.

There are ____ in each group.

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

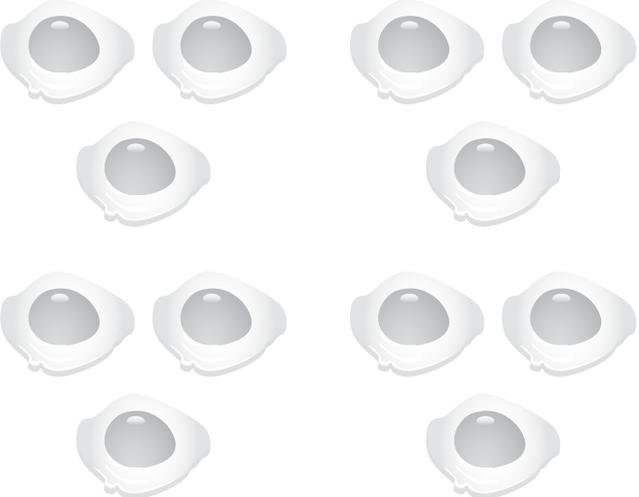
There are ____ pastries altogether.

Worksheet 93

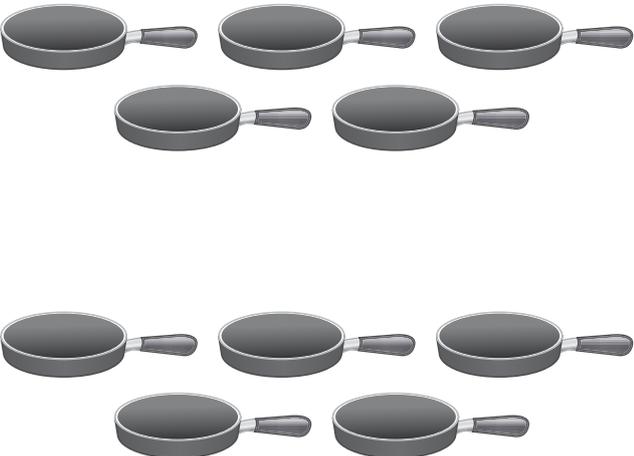
Count and fill in the blanks.



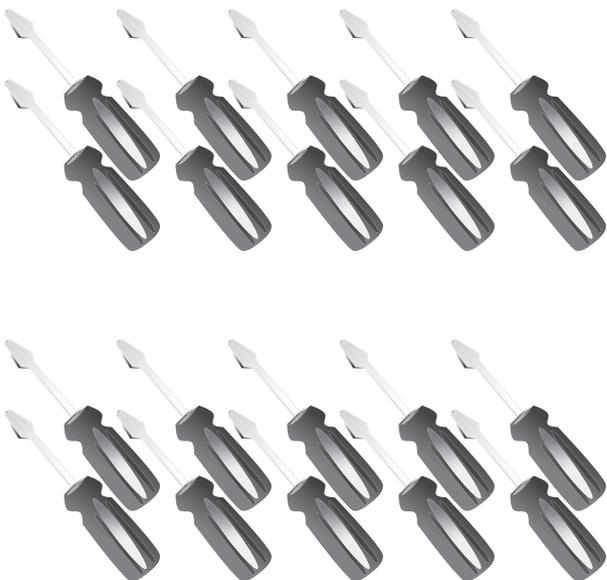
_____ + _____ + _____ + _____
= _____



_____ + _____ + _____ + _____
= _____



_____ + _____ = _____



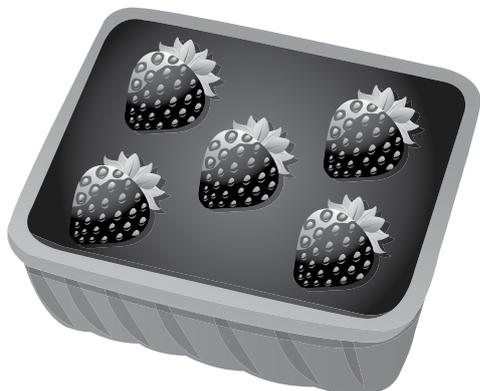
_____ + _____ = _____

Worksheet 94

Draw more equal groups and complete the addition sentences.



$$5 + \underline{\quad} + \underline{\quad} = \underline{\quad}$$



$$5 + \underline{\quad} = \underline{\quad}$$

Worksheet 95

Match each coin/note to its value.



Rs 20



Rs 50



Rs 5



Rs 10



Rs 2

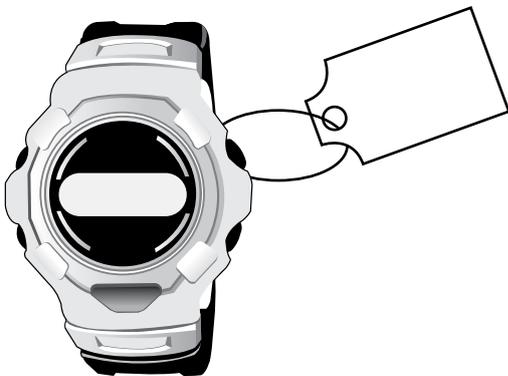
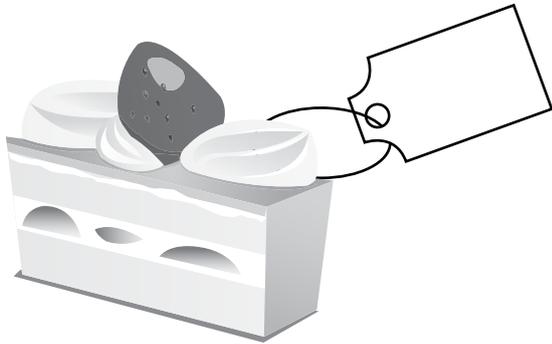
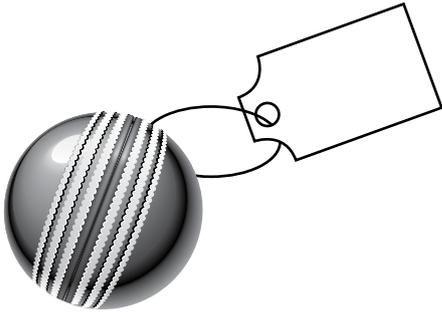
Worksheet 96

Count and write the total amounts.

 <input data-bbox="568 982 759 1094" type="text"/>	 <input data-bbox="1252 982 1444 1094" type="text"/>
 <input data-bbox="568 1771 759 1883" type="text"/>	 <input data-bbox="1252 1771 1444 1883" type="text"/>

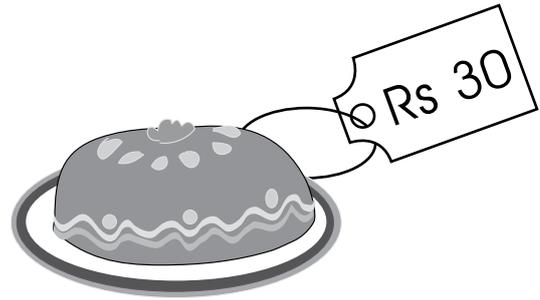
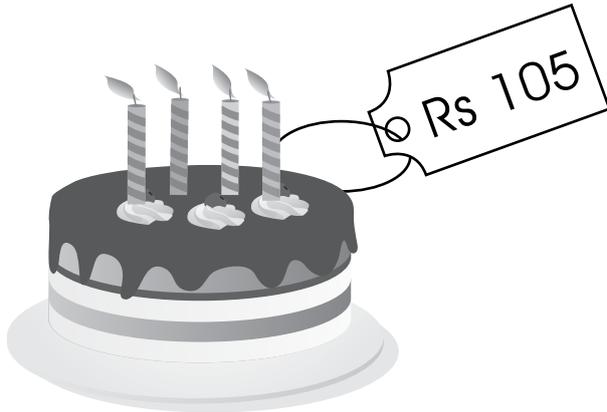
Worksheet 97

Count the money and write the price.



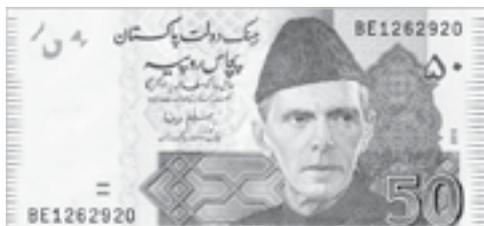
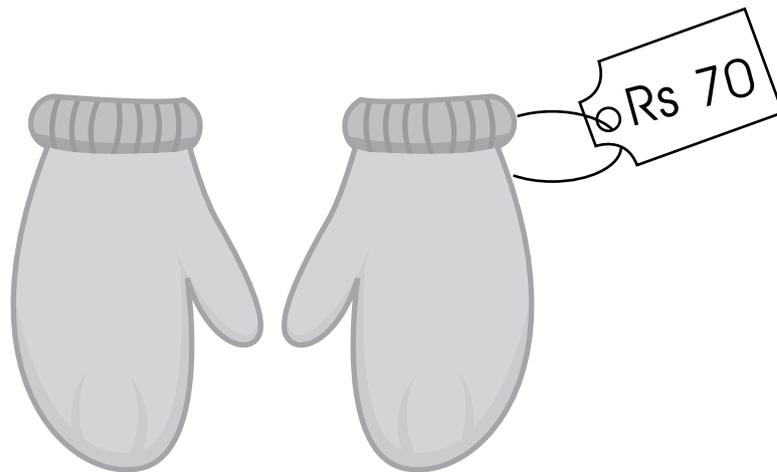
Worksheet 98

Circle the money needed to buy each cake.



Worksheet 99

Circle the money needed to buy the pair of gloves.
Count the money left.



I have Rs ____ left.

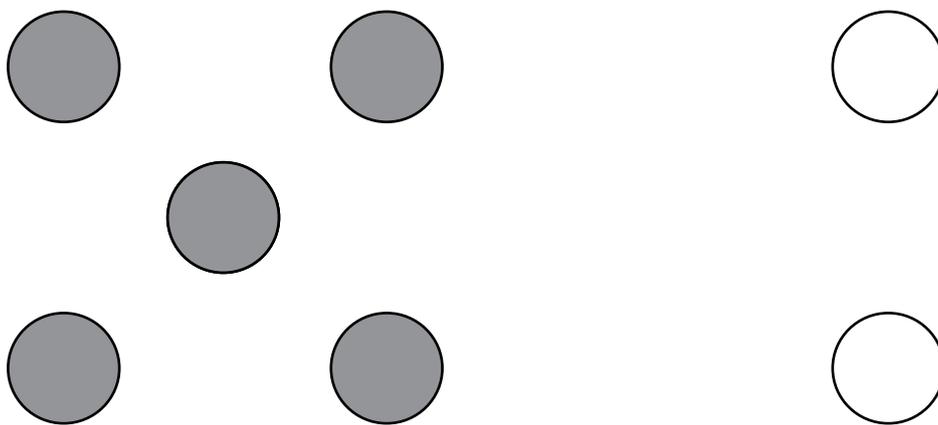
Worksheet 100

Circle groups of 10s. Count in tens and ones to find the total.



Worksheet 101

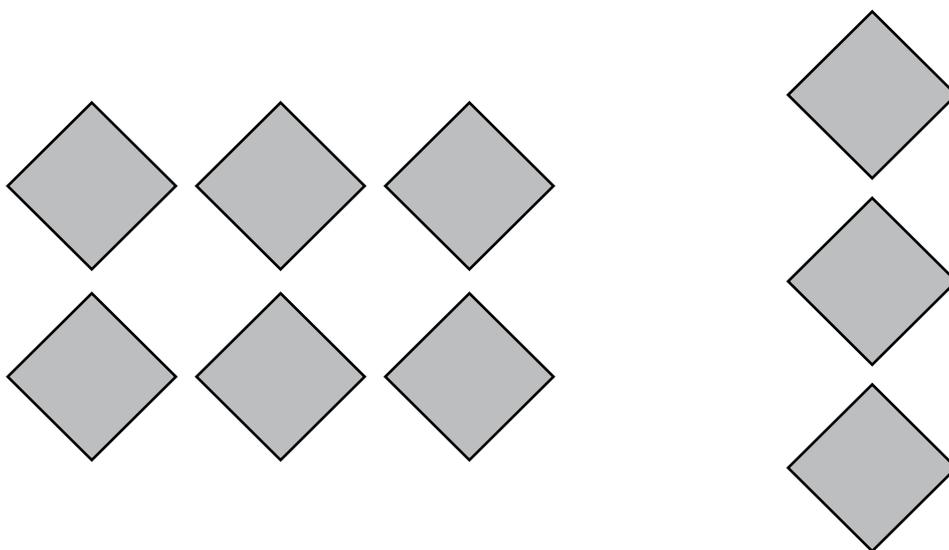
Add or subtract and fill in the blanks.



$$5 + 2 = \underline{\quad}$$

$$7 - 5 = \underline{\quad}$$

$$7 - 2 = \underline{\quad}$$



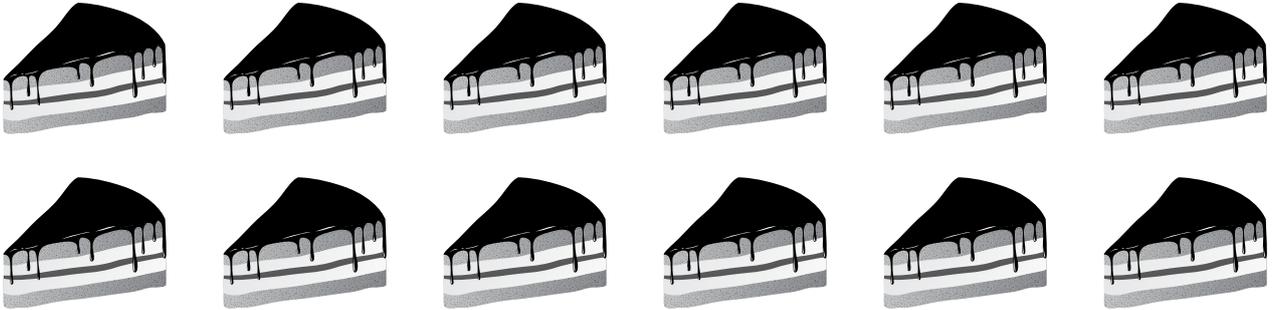
$$6 + 3 = \underline{\quad}$$

$$9 - 6 = \underline{\quad}$$

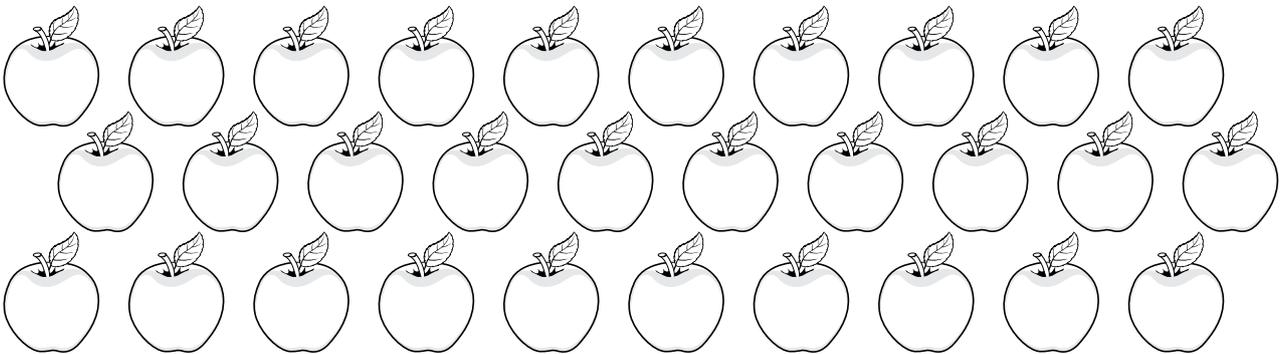
$$9 - 3 = \underline{\quad}$$

Worksheet 102

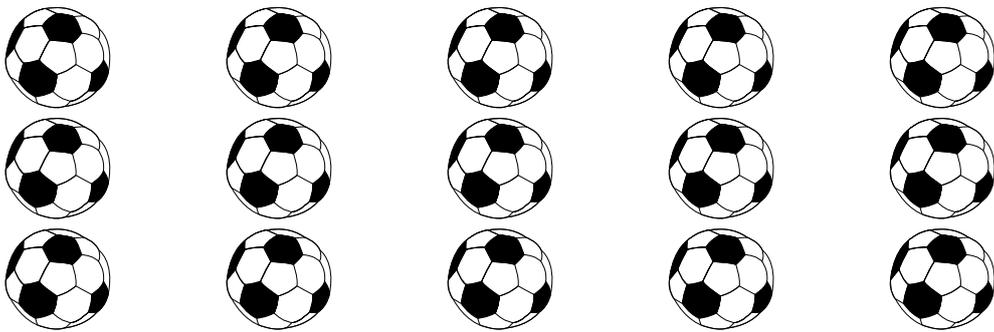
Count and fill in the blanks.



$$\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$



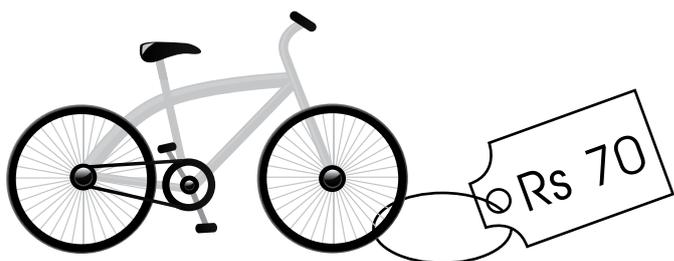
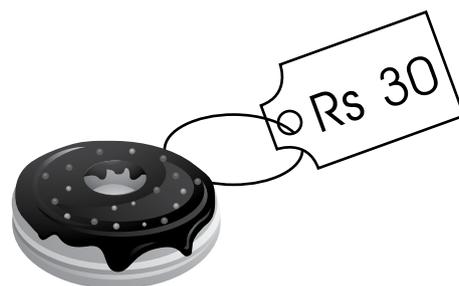
$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

Worksheet 103

Circle the money needed to buy objects by each child.
Circle the child with the most amount of money left.



bicycle and
doughnut



doughnut
and ball



bicycle
and ball



Teaching notes

A series of horizontal dotted lines for writing notes.

Teaching notes

A series of horizontal dotted lines for writing notes.