



PRE-PRIMARY MATHEMATICS

Teaching Guide for Level B

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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

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 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

B1



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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 these concepts with accuracy and confidence.



Pre-assessment activity

- Ask pupils to think about the activities they carried out in the previous term. They should take turns to share what they remember and to talk about the concepts they have learnt.
- Show flashcards of different sets of objects. Start with a flashcard of one object; ask students to identify and count it and show the flashcard of the numeral 1.
- Repeat with flashcards of different numbers of objects and their corresponding numbers.
- Show a blank flashcard and the numeral 0 so that pupils revise the concept of zero
- Place the number cards in sequence on the board and read together the sequence of numbers from 0 to 10.
- Finally read the number sequence backwards.

1.1 Hello... Hello...



Suggested duration

40 minutes

Objectives

- Practise writing numbers 1 to 10 in sequence.

Required resources

- flashcards showing 1 to 10 objects
- flashcards of numbers 1 to 10
- a list of students' home telephone numbers
- Additional:
 - drawing paper (enough for all pupils in the class)
 - crayons

Key terms

telephone

Reinforcing writing of numbers 1 to 10 in sequence

Activity 1

- In sequence, show flashcards of 1 to 10 similar objects. Ask pupils to identify and count the objects shown. Show the corresponding numeral flashcards and ask students to say the numbers.
- Repeat for all the flashcards and respective numbers, in sequence.
- Ask pupils to repeat the sequence of numbers from 1 to 10.

Activity 2

- Ask pupils to look at Activity 1.1. and read the instruction 'Fill in the missing numbers on the telephone.'
- Ask pupils to point to the telephone and elicit the missing numbers. For example, point to 1 and ask what comes after 1. (2) Ask pupils to write 2 in the box next to 1.
- Repeat for 3 and then help pupils to fill in the rest of the missing numbers themselves.
- Read the instruction 'Write your home telephone number in the box', and help pupils to recall and write their telephone numbers.

Additional activities

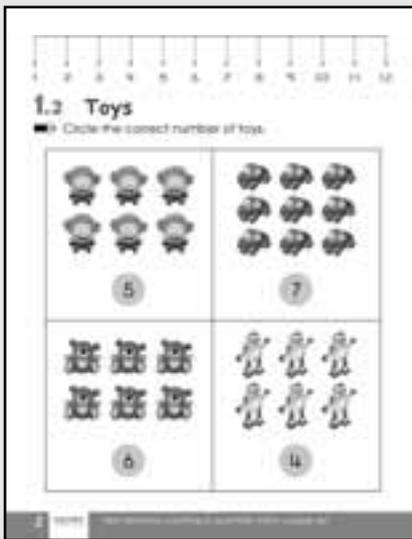
Activity 3

- Ask pupils how many telephones there are at home.
- Ask them to describe the telephones, e.g. colour and size.

Activity 4

- Give each pupil a sheet of drawing paper and some crayons and ask them to design 3 different telephones.
- Encourage them to be creative. However, emphasize that each of the telephones should show the numbers in sequence.
- Ask pupils to vote for the best designs.

1.2 Toys



Suggested duration

40 minutes

Objectives

- Reinforce counting of quantities within a target set.

Required resources

- pencils
- boxes
- marker
- Additional:
worksheets to colour the correct number of objects

Reinforce counting of quantities within a target set

Activity 1

- Place some boxes at the front of the classroom and label them with numbers between 0 and 10.
- Place some pencils beside the boxes.
- Ask 11 pupils to come to the front of the class, give each of them one of the boxes, and ask them to place inside the number of pencils indicated by the box number.
- The rest of the class should check that this is done correctly.
- Ask other pupils to take turns to carry out this activity.

Activity 2

- Ask pupils to describe the picture in Activity 1.2.
- Read the instruction, 'Circle the correct number of toys.'
- Ask pupils to identify the toys in the first set and count the dolls together. (6)
- Ask pupils how many dolls they should circle. (5) Ask them to draw a pencil circle around 5 of the 6 dolls.
- Repeat for the second set of toys.
- Ask pupils to complete the rest of the activity themselves.

Additional activities

Activity 3

- Give out worksheets showing sets of various objects.
- For each set ask the pupils to colour a specific number of objects. For example, Colour 5 leaves (from a set of 7), Colour 9 shoes (from a set of 10).

1.3 Where oh where?



Suggested duration

40 minutes

Objectives

- Write numbers from 1 to 10 in the correct sequence.

Required resources

- building blocks
- Additional:
pictures of different scenarios

Key terms

remote control

Write numbers from 1 to 10 in the correct sequence

Activity 1

- Show pupils 1 building block and elicit that it is 1 block.
- Place a second block on top of the first and elicit that there are 2 blocks.
- Repeat until there are 10 blocks and ask pupils to recite with you, '1, 2, 3, 4, 5, 6, 7, 8, 9, 10.'
- Give the pupils blocks so they can build their own tower and count 1 to 10 in sequence.

Activity 2

- Ask pupils to describe the picture in Activity 1.3.
- Read the statement, 'Naila is looking for the remote control.'
- Ask pupils to point to Naila and ask them questions to check comprehension of the context.
- Read the instruction, 'Join the numbers in order from 1 to 10 to help her find it.'
- Ask pupils to place their pencils on number 1 and help them to join the dots while counting in sequence.
- Elicit that they have helped Naila find the remote control.

Additional activities

Activity 3

- Ask pupils if they have ever lost the remote control and had to search for it.
- Is there another way to turn on the television?
- Ask pupils how they eventually found their remote control.

Activity 4

- Ask pupils to work in pairs and give them pictures of different scenarios.
- For each of the pictures, provide an instruction. For example, "Help the rabbit get from the field back to its hutch".
- Pupils should create a join-the-dots worksheet for their partner to solve the problem.

1.4 Dining table



Suggested duration

40 minutes

Objectives

- Practise counting.

Required resources

- set of cutlery, etc.
- Additional:
worksheets showing different numbers of objects up to 10.

Practise counting

Activity 1

- Bring some cutlery items to class for the pupils to count. For example, show 7 forks and count them together, 1 fork, 2 forks, etc. When the counting is complete, ask pupils to say 'There are 7 forks.'
- Repeat this with other items, and ask pupils to count and say how many of each there are.

Activity 2

- Ask pupils to look at the picture in Activity 1.4.
- Read the instruction 'Count the items in each set and write the number in the box.'
- Point to the first set and ask pupils to identify and count the forks.
- Elicit that they should write 8 in the box. And ask them to repeat 'There are 8 forks.'
- Repeat this activity for the 9 spoons.
- Ask pupils to complete the questions on the cups and saucers themselves.

Additional activities

Activity 3

- Ask pupils if they use any of these items (fork, spoon, cup, and saucer) at home.
- Do pupils use any other cutlery items (e.g. knives)?
- Do pupils know how many of these items they have at home?

Activity 4

- Supply pupils with copies of Worksheet 1 for them to practise counting up to 10.
- Ask the pupils to count and write the numbers.

1.5 Chairs and tables



Suggested duration

40 minutes

Objectives

- Identify and count given items.

Required resources

- 10 identical objects
- 10 cut-outs
- Additional:
drawing paper
stickers (stars and moon)

Key terms

table
chair

Identify and count given items

Activity 1

- Prepare 10 identical objects, e.g. paper cups. Show the pupils 5 objects and ask them to show the number using their fingers.
- Repeat this activity for different numbers of objects up to 10.
- Give each pupil 10 cut-outs. Write a number on the board and ask the pupils to show the same number of cut outs.
- Repeat the activity with different numbers so that pupils can practise counting given items.

Activity 2

- Ask pupils to look at the picture in Activity 1.5.
- Read the instruction 'Circle all the tables.'
- Ask pupils to point to and then circle all the tables.
- Repeat for the chairs.
- Read the instruction 'Count and fill in the blanks.'
- Ask pupils to count the tables and fill in the blank. Read together 'There are 6 tables.'
- Repeat for the chairs.

Additional activities

Activity 3

- Ask pupils how many tables and chairs they have at home.
- Ask pupils to describe their tables and chairs. Do they have the same number of each? Are there more chairs than tables?

Activity 4

- Give each pupil a sheet of drawing paper and stickers of stars and moons.
- Ask pupils to draw a picture of a night sky and to stick 1 moon and 10 stars on the picture.
- Pupils can show their work to the rest of the class to check it is correct.

1.6 Polka dots

1.6 Polka dots

The number of polka dots on the right must be the same as those on the left.

• Draw the correct number of polka dots and write the number.

4 dots	4 dots	4 dots	4
5 dots	5 dots	5 dots	5
6 dots	3 dots	3 dots	
2 dots	1 dot	1 dot	
3 dots	3 dots	3 dots	

Suggested duration

40 minutes

Objectives

- Count, and copy a given pattern.

Required resources

- flashcards showing different numbers of dots
- Additional:
worksheet to count and write the number

Key terms

polka dots

Count, and copy a given pattern

Activity 1

- Show pupils the flashcard of one dot. Ask them to count the dots and draw the number 1 in the air.
- Repeat with the other flashcards, each time asking pupils to count the dots and draw the number in the air.

Activity 2

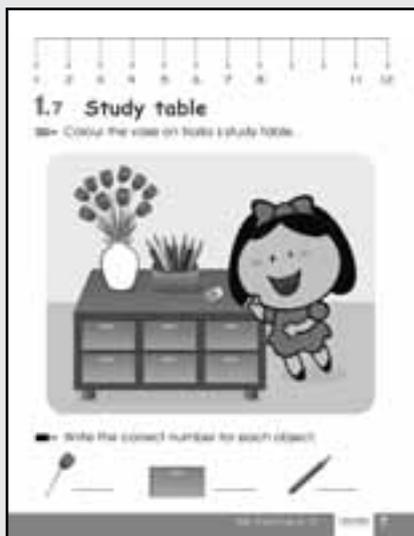
- Ask pupils to look at the picture in Activity 1.6.
- Ask pupils to read the sentence 'The number of polka dots on the right must be the same as those on the left'.
- Ask pupils to point to the polka dots on the left, and then to the polka dots on the right to check understanding.
- Read the instruction, 'Draw the correct number of polka dots and write the number.'
- Point to the second question with 5 polka dots. Ask pupils to trace and colour the orange polka dots and then complete the other 2 patterns of 5 polka dots.
- Ask pupils to trace the number 5.
- Repeat for the question with 9 polka dots.
- Encourage pupils to do the other 2 questions themselves.

Additional activities

Activity 3

- Give pupils Worksheet 2 to count and write the numbers.

1.7 Study table



Suggested duration

40 minutes

Objectives

- Count up to 10.

Required resources

- picture of a living room
- pictures of objects in a living room
- Additional:
worksheet of picture of a bedroom

Key terms

vase
study table

Count up to 10

Activity 1

- Show pupils the drawing of a living room and pictures of things commonly found in a living room.
- Ask a pupil to put e.g. 4 sofas on the drawing.
- Repeat this activity for other numbers of items from 1 to 10.

Activity 2

- Ask pupils to describe the picture in Activity 1.7.
- Read the instruction 'Colour the vase on Naila's study table.'
- Ask pupils to point to the vase and then colour it.
- Read the instruction, 'Write the correct number for each object.'
- Count together the flowers and elicit that they should write 10 in the blank.
- Ask pupils to count the other items themselves.

Additional activities

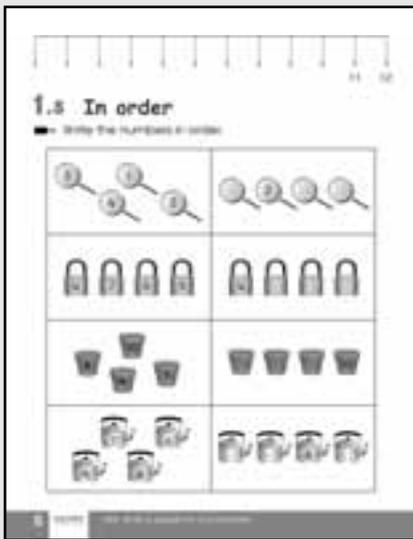
Activity 3

- Ask pupils to describe their study and their study table.
- What items are on their study table?
- How many of each item are on their study table?

Activity 4

- Give each pupil a worksheet showing the picture of a bedroom with various items in it.
- Ask pupils to count how many there are of each item.

1.8 In order



Suggested duration

40 minutes

Objectives

- Write a sequence of 4 numbers.

Required resources

- flashcards of numbers 0 – 10
- Additional:
worksheets for completing sequences of 4 numbers

Write a sequence of 4 numbers)

Activity 1

- Show a sequence of 4 flashcards, e.g. 0, 1, 2, 3, and ask the pupils to read the numbers.
- Repeat with other sequences until pupils are familiar with sequences of four numbers.

Activity 2

- Ask pupils to look at the picture in Activity 1.8.
- Read the instruction 'Write the numbers in order'.
- Ask pupils to look at the first set of numbers and the sequence on the right. Point out that 2 has already been written.
- Ask 'What comes before 2?' and elicit that they should write 1 in the first empty magnifying glass.
- Ask 'What comes after 2?' and elicit that 3 should be written in the empty magnifying glass after 2.
- Repeat for 4.
- Encourage pupils to complete the rest of the sequences themselves.

Additional activities

Activity 3

- Give pupils Worksheet 3 that requires them to complete sequences of 4 numbers.

Introduction

Pupils have learnt how to count things in terms of quantity and compared quantities using the terms same, not the same, fewer and more. They have also learnt to classify things according to given criteria.

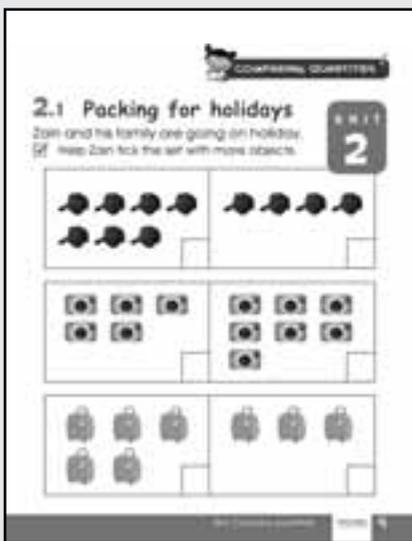
In this unit, pupils are introduced to comparing different sets. By the end of the unit, pupils should be able to use correctly the terms more, fewer, most and fewest.



Pre-assessment activity

- Ask pupils to bring 5 tables to the front of the class. Then, ask them to bring 4 chairs to the front of the class.
- Ask 5 pupils to come to the front of the class and ask each of them to sit at a table. 4 of the pupils should have a chair and a table but one of the pupils will have a table but no chair.
- Ask pupils to explain why this is so, and elicit that there are more tables than chairs.
- Ask pupils to say the word 'more' three times and guide them to say 'There are more tables than chairs.'
- Next, tell explain that there are fewer chairs than tables.
- Ask them to say the word 'fewer' three times and guide them to say 'there are fewer chairs than tables.'

2.1 Packing for holidays



Suggested duration

40 minutes

Objectives

- Compare quantities.

Required resources

- flashcards of different quantities of objects
- Additional:
Worksheet to circle more or less

Key terms

holiday

Comparing quantities

Activity 1

- Show pupils flashcards of different quantities of identical objects, for example, a flashcard of 7 matchsticks. Ask pupils to identify and count the objects, and say '7 matchsticks'.
- Repeat these steps with e.g. a flashcard of 3 torches. Elicit that there are more matchsticks than torches.
- Repeat this with different pairs of flashcards.

Activity 2

- Ask pupils to describe the picture in Activity 2.1.
- Read the statement, 'Zain and his family are going on holiday.' Elicit the meaning of 'going on holiday'.
- Read the instruction, 'Help Zain tick the set with more objects.'
- Look at the first set and ask pupils to identify the object.
- Ask pupils to count the caps on the left side and then the caps on the right. Ask 'Which set has more objects?' Pupils should identify that it is the set on the left and put a tick in that box.
- Ask pupils to complete the questions for the cameras and luggage themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have been on a holiday.
- Ask pupils to describe their experience of packing before their holiday starts.
- Encourage pupils to share their holiday experiences.

Activity 4

- Give out a worksheet for students to circle the set with more objects in each row.

2.2 Blowing bubbles



Suggested duration

40 minutes

Objectives

- Use the term 'more' to compare quantities.

Required resources

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

Key terms

blow
bubble

Use the term 'more' to compare quantities

Activity 1

- Arrange two unequal stacks of building blocks in front of the class.
- Ask pupils to count the number of building blocks in the first stack, e.g. 8.
- Repeat for the second stack, e.g. 10.
- Ask which stack has more building blocks.
- Guide pupils to say, '10 building blocks is more than 8 building blocks.'
- Repeat the activity for other quantities of building blocks.

Activity 2

- Ask pupils to describe the picture in Activity 2.2.
- Read the instruction 'Circle the boy who is blowing more bubbles.'
- Ask pupils to point to the bubbles and to count them.
- Ask them to circle the boy who is blowing more bubbles.

Additional activities

Activity 3

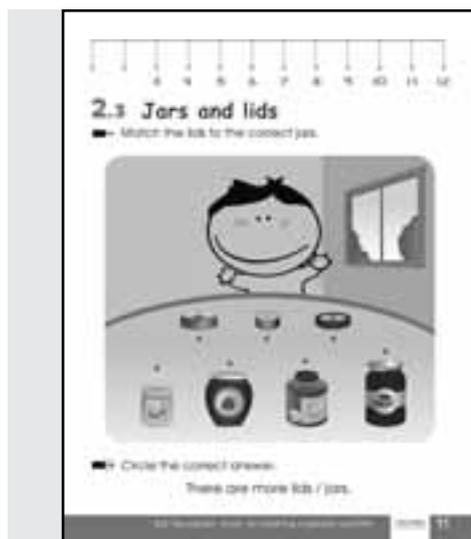
- Ask pupils if they know how to blow bubbles and enjoy blowing them.
- Encourage pupils to talk about when they blow bubbles. Is it during bath time? During play time?

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw two girls, Saneela and Rubab.

- Ask them to draw Saneela holding 8 balloons and Rubab holding more balloons than Saneela.
- Ask pupils to share their drawings with the class and talk about them using the expression 'more balloons than'.
- Use the work to make a classroom display.

2.3 Jars and lids



Suggested duration

40 minutes

Objectives

- Recognize 'more' as meaning a greater quantity.

Required resources

- different plastic bottles and bottle caps

Key terms

lid

jar

Recognize 'more' as meaning a greater quantity

Activity 1

- Display 4 bottles in front of the class and place 3 bottle caps beside them.
- Ask a pupil to screw the correct cap on each of the bottles.
- When 3 caps have been fitted correctly, ask why one bottle has no cap.
- Elicit the sentence 'There are more bottles than caps.'

Activity 2

- Ask pupils to describe the picture in Activity 2.3.
- Read the instruction, 'Match the lids to the correct jars.'
- Ask pupils to point to the jars and the lids to check comprehension.
- Point to the first lid and ask pupils to point to the jar it will fit. If necessary, guide them to match the pattern on the lid to the pattern on the jar.
- Ask pupils to match the lid to the jar using a pencil and a ruler.
- Ask pupils to match the remaining jars and lids in the same way.
- Ask 'Do all the jars have lids?' (No)
- Read the instruction, 'Circle the correct answer.' Ask pupils to circle the answer.
- Read together, 'There are more jars.'

Additional activities

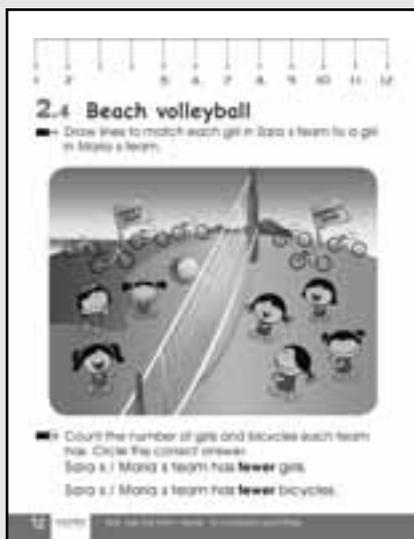
Activity 3

- Ask pupils if all the bottles they have at school or at home have lids.
- Ask pupils what might happen if they lost one of the lids, and elicit that one bottle would not have a lid and there would be more bottles than lids.

Activity 4

- Ask pupils to play several rounds of musical chairs.
- After each round, ask the pupils to explain why (name of pupil) does not have a chair.
- Elicit that there are more pupils than chairs.
- Repeat the activity until one pupil wins the game.

2.4 Beach volleyball



Suggested duration

1 hour

Objectives

- Use the term 'fewer' to compare quantities.

Required resources

- pencils
- Additional:
cereal or pasta shapes for threading
string

Key terms

girl
bicycle
team

Use the term 'fewer' to compare quantities

Activity 1

- Ask a pupil to come to the front of the class and give her/him 7 pencils.
- Ask 8 pupils to come to the front of the class and ask the first pupil to give out the pencils to the 8 pupils. The 8th pupil will not get a pencil.
- Elicit the sentence, 'There are fewer pencils than pupils.'
- Ask pupils to repeat 'fewer' three times.
- Repeat this activity with different numbers of pupils and different numbers of pencils.

Activity 2

- Ask pupils to describe the picture in Activity 2.4.
- Read the instruction, 'Draw lines to match each girl in Sara's team to a girl in Maria's team.'
- Ask pupils to point to Sara's team and then to Maria's team to check understanding of context.
- Ask pupils to match each girl in Sara's team to a girl in Maria's team using a pencil and a ruler.
- Elicit that there is one more girl in Maria's team.
- Read the instruction 'Count how many girls and bicycles each team has.'
- Ask pupils to count the girls in Sara's team. (3), and in Maria's team. (4)
- Repeat for the bicycles in each team. (3 and 4)
- Read the instruction 'Circle the correct answer' and ask pupils to do it themselves.

Additional activities

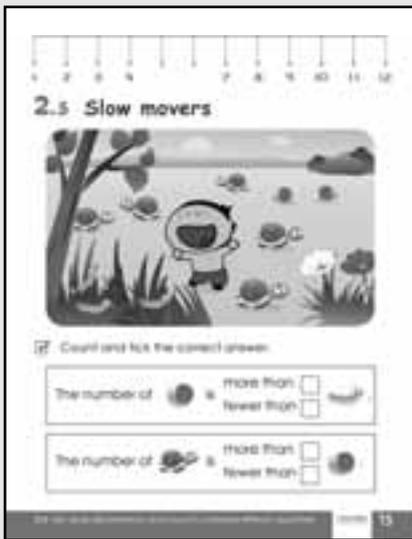
Activity 3

- Ask pupils if they have played beach volleyball and if they like playing it.
- Encourage them to relate their experiences of playing beach volleyball.

Activity 4

- Ask pupils to work in pairs.
- Give each pupil a length of string, and a number of cereals/pasta shapes, ensuring that one of each pair has fewer than the other.
- Ask pupils to thread the cereal/pasta shapes on to the string to form a necklace, and tie the two ends of the string together.
- Ask pupil pairs to use the phrase fewer shapes than to compare the lengths of their necklaces.

2.5 Slow movers



Suggested duration

40 minutes

Objectives

- Use visual discrimination and count to compare different quantities.

Required resources

- picture of a garden
- Additional:
worksheet to match mice to cheese

Use visual discrimination and count to compare different quantities

Activity 1

- Display the picture of a garden on the overhead projector.
- Ask pupils various questions about the picture, e.g., how many butterflies / flowers are there?
- Elicit comparison sentences such as 'There are fewer butterflies than flowers.'
- Repeat to elicit more sentences using more than and fewer than.

Activity 2

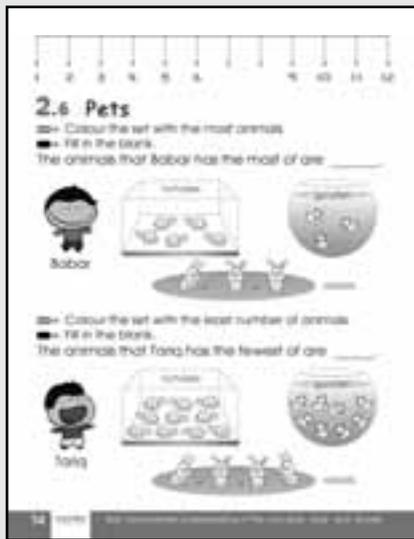
- Ask pupils to describe the picture in Activity 2.5.
- Read the instruction, 'Count and tick the correct answer.'
- Ask pupils to look at the first set of questions. Point to a snail and ask pupils to identify it and then count the snails. (2)
- Repeat for the caterpillars, (3) and guide pupils to tick the box fewer than for the first set.
- Read together, 'The number of snails is fewer than caterpillars.'
- Ask pupils to count the tortoises and to answer the second question themselves.

Additional activities

Activity 3

- Give out Worksheet 4 that shows some cats and chicks.
- Ensure that there are fewer chicks than cats.
- Ask pupils to match the chicks to the cats and elicit that there are fewer chicks than cats.

2.6 Pets



Suggested duration

40 minutes

Objectives

- Demonstrate understanding of the concepts 'most' and 'fewest'.

Required resources

- sweets
- Additional:
worksheets to classify most and fewest.

Key terms

most
fewest

Demonstrate understanding of the concepts 'most' and 'fewest'

Activity 1

- Ask 3 pupils to come to the front of the class and give each of them a different number of sweets, e.g. 10, 5 and 2.
- Ask them to count their sweets and take turns to say how many they have.
- Explain that the first pupil has most sweets. Ask the students to repeat 'the most' 3 times.
- Explain that the third pupil has fewest sweets and ask the students to repeat 'the fewest' 3 times.

Activity 2

- Ask pupils to describe the picture in Activity 2.6.
- Read the instruction, 'Colour the set with the most animals.'
- Ask pupils to count the tortoises (5), the goldfish (3), and the rabbits (3).
- Ask the pupils to name the animal of which there are most.(the tortoise).
- Ask pupils to colour the 5 tortoises.
- Read the instruction, 'Fill in the blank'.
- Read with the pupils, 'The animals that Babar has the most of are tortoises.'
- Help pupils to complete the question of the number of animals Tariq has fewest of themselves.

Additional activities

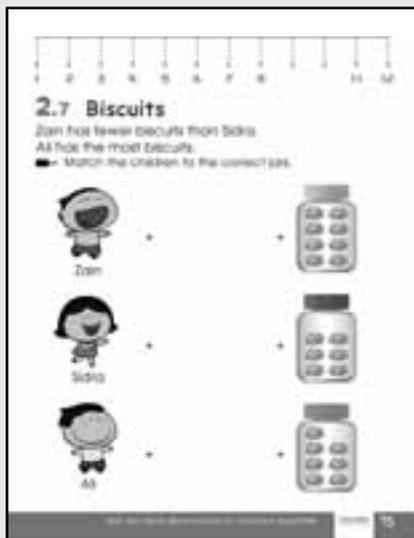
Activity 3

- Encourage pupils to talk about their pets.
- Which pets do pupils have most of and which pets do pupils have fewest of?
- Teachers can list a few pets and ask pupils who have those pets to raise their hands.
- Tabulate the results and point out to pupils the pets of which there are most and fewest.

Activity 4

- Give pupils Worksheet 5 to classify objects into most and fewest.
- Explain that students should sort the objects by crossing or ticking the correct categories.

2.7 Biscuits



Suggested duration

40 minutes

Objectives

- Use visual discrimination to compare quantities

Required resources

- coloured pencils
- Additional:
worksheet with pictures of 3 baskets

Key terms

biscuit

Use visual discrimination to compare quantities

Activity 1

- Lay out sets of 10, 8, and 5 coloured pencils on the table and ask 3 pupils to come to the table.
Tell Pupil A, 'You have the most pencils,' and ask him/her to take the correct set.
- Tell Pupil B, 'You have the fewest pencils and ask him/her to take the correct set.
- Pupil C then takes the remaining set.
- Ask the rest of the students to check that the 3 pupils have taken the correct sets.

Activity 2

- Ask pupils to describe the picture in Activity 2.7.
- Read the statement, 'Zain has fewer biscuits than Sidra.' and ask pupils to point to Zain and Sidra.
- Read the statement, 'Ali has the most biscuits.' Ask pupils to point to Ali to identify the correct child.
- Read the instruction, 'Match the children to the correct jars.'
- Ask pupils to count the biscuits in each jar.
- Repeat 'Ali has the most biscuits' and ask them to match Ali to the correct jar first. (8 biscuits in first jar).
- Repeat, 'Zain has fewer biscuits than Sidra.' Ask pupils to point to Zain's jar and to use a pencil and ruler to match Zain and Sidra and their jars.

Additional activities

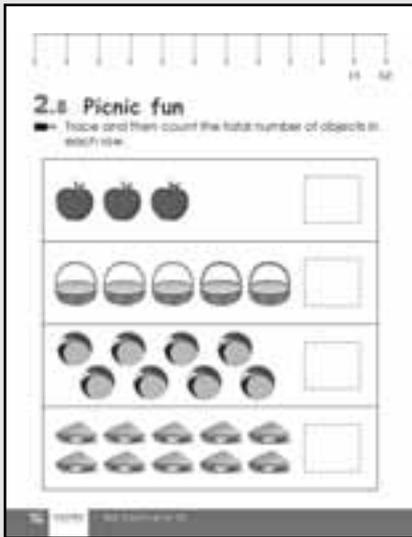
Activity 3

- Ask pupils if they like to eat biscuits.
- Do they share biscuits with their siblings and parents?
- Who usually eats the most biscuits and who eats the fewest?

Activity 4

- Give each pupil a worksheet showing 3 baskets labelled A, B and C.
- Ask pupils to draw 8 apples in basket A and tell them that basket A contains the most apples.
- Ask them to draw fewer apples in basket C than B. Discuss the possible numbers of apples that pupils can draw. Allow for a variety of answers.

2.8 Picnic fun



Suggested duration

40 minutes

Objectives

- Count up to 10.

Required resources

- Additional:
worksheet to identify sets of up to 10 objects

Count up to 10

Activity 1

- Divide the board into 3 columns headed: 4 pears, 6 stars, 10 balloons.
- Ask 3 pupils to draw the correct number of things in each column.
- The rest of the students should check that the correct numbers of things are drawn.
- Repeat the activity with different pupils and different numbers of objects.

Activity 2

- Ask pupils to describe the picture in Activity 2.8.
- Read the instruction, 'Trace and then count the total number of objects in each row.'
- Ask pupils to trace each of the objects.
- Ask 'How many apples are there? (3), and ask pupils to write 3 in the box beside them.
- Ask pupils to complete the rest of the activity themselves.

Additional activities

Activity 3

- Give out Worksheet 6 showing sets of up to 10 objects.
- Ask pupils to count each of the objects and write the correct number.

Introduction

In this unit, pupils are introduced to the number 11. By the end of the unit, pupils should be able to recognise the number 11, and understand the quantity of 11 through counting objects.

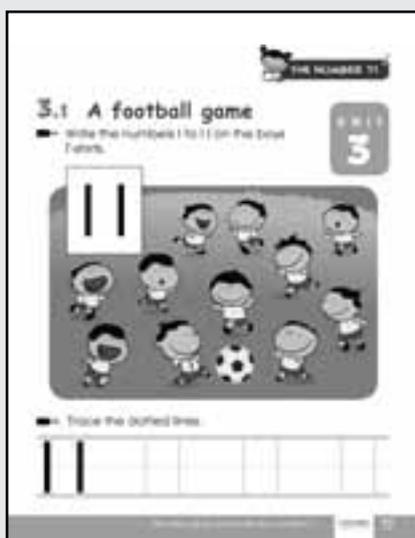


Pre-assessment activity

- Use number flashcards to revise counting from 0 to 10, or ask pupils to show the numbers using their fingers.
- Ask what number comes after 10.
- Ask pupils to count e.g. 10 building blocks.
- Add one more block, recount and, if necessary, explain that there are now 11 blocks.
- Use the blocks to count together in sequence from 1 to 11
- Ask 11 pupils to stand at the front of the classroom and count them together. Elicit that there are 11 pupils.



3.1 A football game



Suggested duration

40 minutes

Objectives

- Recognize the number 11.
- Write the number 11.

Required resources

- flashcards of 0 to 11 objects
- flashcards of numbers 0 to 11

Key terms

T-shirt

Recognizing and writing the number 11

Activity 1

- Show pupils different sets of 0 to 11 objects and ask pupils to identify the objects.
- Then, show pupils different sets of objects in turn and ask them to count each set. For example, for a set of 10 notebooks, ask 'How many notebooks are there?' and pupils should say '10 notebooks'.

- Show the corresponding number flashcard and ask what number is shown.
- Repeat for flashcards of other sets of from 0 to 11 objects.
- Place a flashcard of number 11 on the board and write '11' above it. Say 'eleven' and ask pupils to repeat it after you.
- Write the number 11 on the board again, large enough for all pupils to see how it is written. Write it slowly and ask pupils to use their index finger to trace the number 11 in the air.

Activity 2

- Ask pupils to describe the picture in Activity 3.1.
- Read the instruction, 'Write the numbers 1 to 11 on the boys' T-shirts.'
- Ask pupils to point to the boy with the 1 on his T-shirt.
- Ask pupils to continue writing the numbers from 2 to 11 on the other boys' T-shirts.
- Read the instruction, 'Trace the dotted lines', and ask pupils to practise writing 11 by tracing the dotted lines.

Additional activities

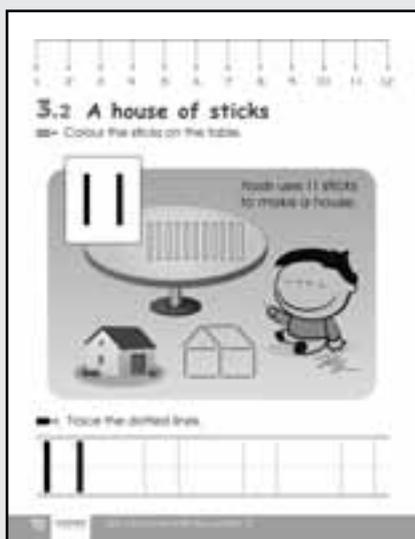
Activity 3

- Ask pupils if they know how many players there are in a football team.
- Ask pupils to raise their hands if they are a member of a football team. What number is on their shirt?
- Do pupils remember the number of a favourite footballer? Encourage pupils to talk about their favourite footballers.

Activity 4

- Organise pupils to play a game of football, ensuring that each player wears a number 1 to 11.
- Players should call out the number of the player they are passing the ball to. If s/he forgets to call the number, the ball goes to the other team.
- Encourage pupils to pass the ball and practise numbers 1 to 11 at the same time.

3.2 A house of sticks



Suggested duration

1 hour

Objectives

- Count the number 11.
- Write the number 11.

Required resources

- pick-up sticks
- flashcard of number 11
- Additional:
 - construction paper
 - glue
 - toothpicks

Key terms

stick
house

Counting and writing the number 11

Activity 1

- Place 11 sticks on a table in front of the class. Pick up the sticks one-by-one and count them together.
- Show the flashcard of number 11 and ask pupils to repeat 11 three times.
- Encourage the pupils to say, 'There are 11 sticks'.
- Ask 3 pupils at a time to come to the front of the class to play Pick Up Sticks: scatter the 11 sticks on the table and ask the pupils to take turns to pick up a stick, ensuring that the other sticks do not move as they pick up that stick.
- Ask them to count as they pick up the sticks.
- When all 11 sticks have been picked up, say 11 and show the flashcard of number 11.

Activity 2

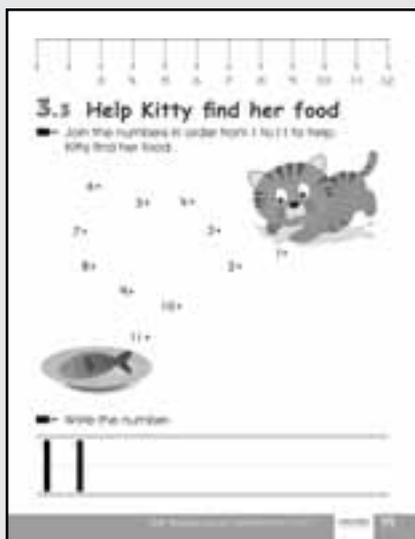
- Ask pupils to describe the picture in Activity 3.1.
- Read the instruction 'Colour the sticks on the table,' and ask pupils to colour the sticks in any colour they want.
- Read the statement, 'Nadir uses 11 sticks to make a house.'
- Ask pupils to point to the house and count the 11 sticks that make the house.
- Read the instruction 'Trace the dotted lines.' Ask pupils to practise writing the number 11 by tracing the dotted lines.

Additional activities

Activity 3

- Give each pupil a sheet of construction paper, 11 toothpicks, and glue, and explain that they are going to make a card.
- Demonstrate how to fold the construction paper in half to form the shape of a card.
- Demonstrate how to use the 11 toothpicks to create one or two designs for the cover of their card. For example, houses, tents, rockets, etc.
- Explain how to glue the toothpicks onto the card and help pupils to decorate the rest of the card.
- Ask pupils to share their designs with the class.

3.3 Help Kitty find her food



Suggested duration

40 minutes

Objectives

- Sequencing of numbers from 1 to 11.

Required resources

- flashcards of numbers 1 to 11
- Additional:
Join-the -dots worksheets

Key terms

Kitty
food

Sequencing of numbers from 1 to 11

Activity 1

- Revise the sequence of numbers from 1 to 10 by asking what number comes after 1, 2, 3, 4, 5, 6, 7, 8 and 9 respectively. Then, show flashcards of numbers 1 to 10 in random order and ask the pupils to arrange them in the correct order. Recite together the sequence of numbers from 1 to 10
- Place the flashcards of numbers 1 to 10 on the board in the correct sequence. Show the flashcard of number 11 and elicit that it should be placed after the flashcard of number 10. Recite together the numbers 1 to 11 in sequence.
- Place the flashcards of numbers 1 to 11 on the board in the correct order and explain that they are arranged in sequence. Ask pupils to recite the numbers 1 to 11 in sequence again.
- Revise writing the number 11 by asking pupils to draw it in the air with their index finger.

Activity 2

- Ask pupils to describe the picture in Activity 3.3.
- Read the instruction, 'Join the numbers in order from 1 to 11 to help Kitty find her food.'
- Ask pupils to point to Kitty, and ask questions to ensure that they understand the context.
- Ask pupils to recite the numbers 1 to 11 as they join the dots to trace the path from Kitty to her food. If necessary, guide pupils by asking them to begin at number 1 and ask what number comes next; repeat for each number until all dots have been joined in order.
- Elicit that the path leads to the fish.
- Read the instruction, 'Write the number', and ask pupils to practise writing the number 11.

Additional activities

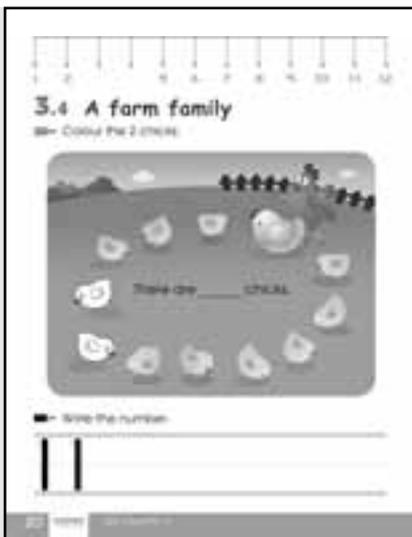
Activity 3

- Ask pupils if they have seen a cat eat a fish or have fed a cat with fish.

Activity 4

- Give pupils join-the-dots worksheets using numbers from 1 to 11 and ask them to complete them to form a picture.
- Teachers can also encourage pupils to create their own worksheets by drawing pictures and adding dots from 1 to 11 for their classmates to connect.

3.4 A farm family



Suggested duration

40 minutes

Objectives

- Count to 11.

Required resources

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

Key terms

chick

Count to 11

Activity 1

- Play a game of a mother hen and her chicks: one pupil should act as the mother hen and 11 pupils should act as chicks.

- Ask 1 pupil to be the eagle who tries to catch all the chicks while the 'mother hen' protects them.
- As they line up behind her, the 'eagle' runs around and tries to tap a 'chick', starting from the end of the line. Once a 'chick' is tapped, he/she is out of the game.
- The 'eagle' tries to capture all 11 'chicks'.

Activity 2

- Ask pupils to describe the picture in Activity 3.4.
- Ask pupils to use a yellow crayon to colour the 2 chicks that are not coloured.
- Ask pupils to count the chicks and read together, 'There are 11 chicks.'
- Read the instruction, 'Write the number', and ask pupils to practise writing the number 11.
- Check that the pupils have completed the activity correctly.

Additional activities

Activity 3

- Ask pupils if they have been to a farm.
- Ask pupils to talk about farm animals and relate their experiences of being on a farm.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw a farm.
- Ask them to draw 11 cows on the farm.
- Display some of the drawings so that pupils can familiarize themselves with the number 11.

3.5 Ice cream treats



Suggested duration

40 minutes

Objectives

- Count sets of 9, 10, and 11.

Required resources

- flashcards of 9, 10 or 11 objects
- flashcards of numbers 9, 10 and 11
- Additional:
worksheets to count sets of 9, 10 and 11

Key terms

ice cream

Count sets of 9, 10 and 11

Activity 1

- Show pupils flashcards of 9, 10, or 11 of the same objects. Ask pupils to identify and count the objects shown on each flashcard. Show the corresponding number cards and ask pupils to say the numbers.
- Ask pupils to trace the numbers 9, 10 and 11 in the air with their index finger to revise writing these numbers.
- Repeat for all the flashcards and numbers shown on the flashcards.

Activity 2

- Ask pupils to describe the picture in Activity 3.5.
- Read the instruction, 'Count and write the number of ice creams in each set.'
- Ask pupils to count the ice creams in the first set and write the number '10' in the circle beside.
- Repeat for the second and third sets.

Additional activities

Activity 3

- Ask pupils if they like to eat ice cream.
- Ask them to describe their favourite ice cream flavours.

Activity 4

- Give pupils a worksheet to count sets of 9, 10 and 11 objects.
- Instruct pupils to circle the set with 9 items, colour the set with 10 items, and to draw a box around the set with 11 items.

3.6 Dinosaur



Suggested duration

40 minutes

Objectives

- Recognize the value of 11.

Required resources

- picture of prehistoric times with dinosaurs
- Additional:
 - construction paper
 - brown ink pads
 - pencils

Recognizing the value of 11

Activity 1

- Display a picture of prehistoric times with dinosaurs on the overhead projector.
- Ask questions about the picture, e.g., 'How many volcanoes/trees/clouds/dinosaurs are there? There should be at least 11 of one object.'
- Encourage pupils to ask questions about the picture for other students to answer.

Activity 2

- Ask pupils to describe the picture in Activity 3.6.
- Read the instruction, 'Colour the spikes on the dinosaur.'
- Ask pupils to point to the spikes of the dinosaur and colour them.
- Read the instruction, 'Count the spikes and circle the correct number.'
- Count as you point to each spike and elicit that they should circle number 11.

Additional activities

Activity 3

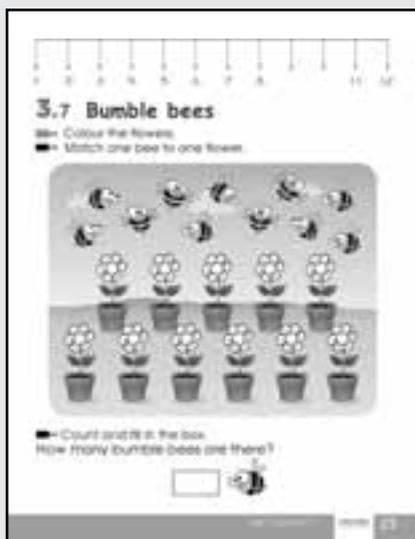
- Ask pupils to raise their hands if they know anything about dinosaurs.
- Tell pupils to share with the rest of the class dinosaur stories that they have heard or that they make up themselves.

Activity 4

- Give the pupils some circles cut from beige/light brown construction paper. Explain that they are going to make 'chocolate chip cookies'.
- Place some brown ink pads and new pencils around the class.

- Demonstrate how to use the eraser on the end of the pencil as an ink stamp to make small, brown circles on the cut-outs.
- Instruct pupils to stamp 11 'chocolate chips' on each of their cookie cut-outs.

3.7 Bumble bees



Suggested duration

40 minutes

Objectives

- Count to 11.

Required resources

- 11 boxes
- 11 balls
- Additional:
worksheet showing 11 hangers in a cupboard.

Key terms

flower

bumble bee

Count to 11

Activity 1

- Place 11 empty boxes at the front of the class.
- Ask pupils to count the boxes.(11)
- Place 11 balls on the table and ask pupils if there are enough boxes to put 1 ball in each box.
- Demonstrate that this can be done and elicit that there are 11 balls.

Activity 2

- Ask pupils to describe the picture in Activity 3.7.
- Read the instruction, 'Colour the flowers.' Ask pupils to point to the flowers and colour them.
- Read the instruction, 'Match one bee to one flower.'
- Ask pupils to use their index finger to trace a line from one bee to one flower. Then ask them to draw a line to join the bee and flower using a ruler and pencil.
- Ask pupils to match all the bees and flowers themselves.
- Read the instruction, 'Count and fill in the box', and count the bumble bees together. Ask pupils to write '11' in the box.

Additional activities

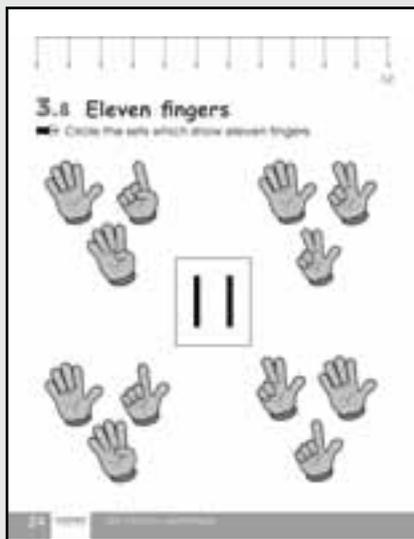
Activity 3

- Ask pupils if they have seen bumble bees.
- Ask pupils if they know what attracts bumble bees to flowers.
- Warn pupils to be careful of bumble bees because there is a danger they might get stung.

Activity 4

- Give pupils a worksheet showing 11 hangers in a cupboard.
- Ask pupils to draw a piece of clothing on each hanger.

3.8 Eleven fingers



Suggested duration

40 minutes

Objectives

- Count on using fingers.

Required resources

- Additional:
water colour / Ink pad (safe for children)
drawing paper

Key terms

finger

Count on using fingers

Activity 1

- Ask pupils to count 11 using their fingers: ask them to close their fists and show their first finger (thumb) and say 1. They should count as they unroll each finger, 5 on one hand and another 5 on the other hand. (10)
- Ask them to close their fists again and show their first finger. Explain that they have already counted 10, so this represents 11.
- Introduce other variations of counting 11 on their fingers. For example, 5 on one hand, 4 on the other (to make 9) and then 2 more on the first hand again to make 11. Ask pupils to suggest different variations of how to count up to 11 using their fingers.

Activity 2

- Ask pupils to describe the picture in Activity 3.8.
- Read the instruction, 'Circle the sets which show eleven fingers.'
- Ask pupils to count the fingers in the first set. Elicit that it does not show 11 fingers.
- Repeat for the second set and elicit that there are 11 fingers. Ask pupils to circle this set.
- Ask pupils to do the other 2 sets themselves.

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and water colour / ink pad.
- Ask pupils to paint their hands and make a hand print showing 10 fingers on the paper. Then, ask pupils to print a thumb print to show 11.
- Ask pupils to form 2 other prints to depict 11.
- Ask pupils to share their pictures with the class.

Introduction

In this unit, pupils are introduced to the number 12. By the end of the unit, pupils should be able to recognise the number 12, and understand the quantity of 12 through counting objects.

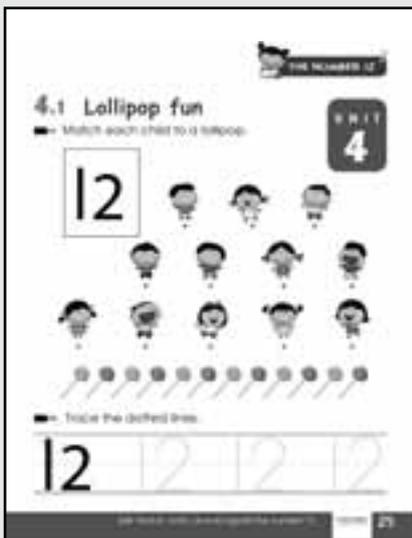


Pre-assessment activity

- Use flashcards to revise the numbers 0 to 11, or ask pupils to show the numbers using their fingers.
- Ask what number comes after 11 and introduce the number 12 as in previous units.



4.1 Lollipop fun



Suggested duration

1 hour

Objectives

- Match, write and recognize the number 12.

Required resources

- flashcards of 0 to 12 objects
- flashcards of numbers 0 to 12
- Additional:
matching sets worksheet

Key terms

lollipop

Match, write and recognize the number 12

Activity 1

- Use the flashcards of objects and numbers as in the previous unit to introduce the number 12.

Activity 2

- Ask pupils to describe the picture in Activity 4.1.
- Read the instruction, 'Match each child to a lollipop.'
- Ask pupils to point to 1 child and use a finger to trace a line between one child and one lollipop before matching them using a ruler and pencil.
- Ask pupils to match each child to a lollipop.

- Read the instruction, 'Trace the dotted lines.', and ask pupils to practise writing the number 12 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils if they like lollipops.
- Ask them to name their favourite lollipop flavours.

Activity 4

- Give pupils a 'matching sets' worksheet. The worksheet could show 12 balls of yarn in the centre and 3 sets of cats with 12, 10, and 8 cats respectively
- Ask pupils to match and circle the correct set so that each cat has one ball of yarn.
- Pupils should match the set with 12 cats to the balls of yarn.

4.2 Stack the cans



Suggested duration

40 minutes

Objectives

Count the number 12.
Write the number 12.

Required resources

- cans
- flashcard of number 12
- Additional:
worksheet to show the quantity 12

Key terms

can

Counting and writing the number 12

Activity 1

- Arrange some cans in front of the class. First, place 5 cans in a straight line and ask pupils to count them.
- Next, stack 4 cans on top of the 5 and ask the pupils to count on to find the total number. (6,7,8,9)
- Stack 3 more cans on top and ask pupils to count together with you. (10, 11, 12)
- Ask pupils how many cans there are in the stack. (12)
- Show the flashcard of number 12 and ask pupils to repeat 12 three times.

- Restack the 12 cans in various ways and each time, ask the pupils to count them. Show the flashcard of number 12 each time and ask pupils to repeat 12 after you.

Activity 2

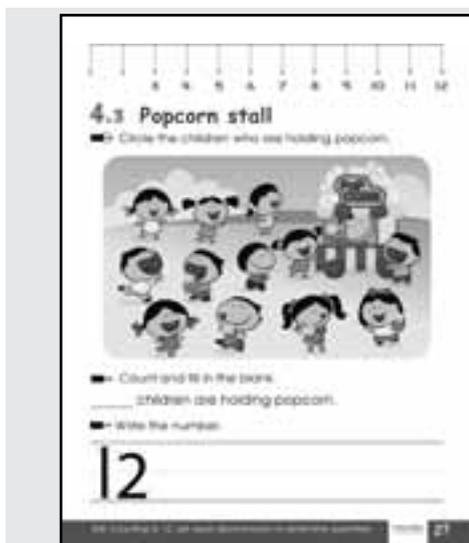
- Ask pupils to describe the picture in Activity 4.2.
Read the instruction 'Trace the 3 cans.'
- Ask pupils to point to the 3 cans and trace the dotted lines in pencil.
- Read the instruction, 'Count how many cans there are altogether.'
- Ask pupils to point to the cans as they count them. (12)
- Read the instruction, 'Trace the dotted lines', and ask pupils to practise writing the number 12 by tracing the dotted lines.

Additional activities

Activity 3

- Give pupils a worksheet which shows different sets of objects. Ask pupils to circle the sets of 12.

4.3 Popcorn stall



Suggested duration

40 minutes

Objectives

- Count to 12.
- Use visual discrimination to determine quantities

Required resources

- picture of children at a funfair
- Additional:
drawing paper (enough for all pupils in the class)

Key terms

popcorn

Counting to 12 and using visual discrimination to determine quantities

Activity 1

- Display on the overhead projector a picture of children at a funfair. There should be at least 12 of one object for one of the questions.

- Ask questions about the picture. For example 'How many children are there? How many children are eating ice cream? How many clouds are there? How many children are not holding a drink?'

Ask pupils to form and ask their own questions about the picture.

Activity 2

- Ask pupils to describe the picture in Activity 4.3.
Read the instruction, 'Circle the children who are holding popcorn.'
- Ask pupils to point to the children who are holding popcorn and to circle them in pencil.
- Read the instruction, 'Count and fill in the blank.'
- Elicit that 4 should be written in the blank. Read together '4 children are holding popcorn.'
- Ask pupils to count the children in the picture. (12)
- Read aloud the instruction, 'Write the number', and ask pupils to practise writing the number 12.

Additional activities

Activity 3

- Ask pupils if they like popcorn.

Ask them to talk about where they usually eat popcorn. Is it at the cinema? Is it at funfairs?

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw a picture of a carnival including any relevant items they wish.
- Ask them to include 12 cans of drink in the picture, at the drink stall and/or in people's hands.
- Ensure that pupils have drawn the correct number of cans.
- Ask pupils to share their drawings with the class.

4.4 Who did it?



Suggested duration

40 minutes

Objectives

Count and write 12.

Required resources

- a present
- Additional:
worksheet of picture of a crime scene

Key terms

footstep
spill
milk

Count and write 12

Activity 1

- Move furniture to create an empty space in the centre of the classroom and place a present in the space.
- Position 3 pupils around the present. Ensure that 1 pupil is about 12 steps from the present, one is more than 12 steps from the present, and the third only a few steps from it.
- Explain that the pupil who takes exactly 12 steps to reach it, will get the present.
- Ask each pupil in turn to walk to the present, counting the number of steps they take. Allow them to take large or small steps, but the winner has to reach the present in 12 steps.
- Ask other groups of 3 pupils to take turns to carry out this activity.

Activity 2

- Ask pupils to describe the picture in Activity 4.4.
Read the statement, 'The child who took 12 footsteps has spilled some milk.'
- Check understanding of context by asking pupils to point to the spilled milk and the footsteps.
- Point to the first child and count together the number of footprints. (4)
- Repeat for the second and third children.
- Read the instruction, 'Circle the child who spilled the milk.' Elicit the correct answer and ask pupils to circle that child.
- Read the instruction, 'Write the number', and ask pupils to practise writing the number 12.

Additional activities

Activity 3

- Ask pupils if they have ever spilled a drink.
What did they do? Did they help to clean it up?

Activity 4

- Give each pupil a worksheet depicting a crime scene, and clues to find the culprit.
- For example, show fingerprints and tell pupils that the culprit is the one who left 12 fingerprints on the knife.
- Ask pupils to count the fingerprints to identify the culprit.

4.5 Balloons



Suggested duration

40 minutes

Objectives

Match and count 12 items.

Required resources

- nuts and bolts
- Additional:
drawing paper
water colour
brush

Key terms

funfair
balloon

Match and count 12 items

Activity 1

- Place 12 nuts at the front of the class.
- Hold up one nut at a time and ask pupils to count them.
- Then, set out 12 bolts on the table.
- Ask pupils to come to the front of the class and screw one nut onto each bolt.
- Point out that each nut can be matched to a bolt.
- Ask pupils, 'How many bolts are there?' (12)

Activity 2

- Ask pupils to describe the picture in Activity 4.5.
Read the statement, 'Mum, Dad, and Nadir are at the funfair', and ask pupils to point to Mum, Dad and Nadir.
- Read the instruction, 'Draw lines from Nadir's hands to all the balloons.'
- Ask pupils to draw lines from Nadir's hands to all the balloons using a pencil and a ruler.
Read the instruction, 'Write the number of balloons Nadir has.'
- Ask pupils to count the balloons and write 12 in the space.
- Read together, 'Nadir has 12 balloons in his hands.'

Additional activities

Activity 3

- Ask pupils if they like to go to funfairs with their parents.
Do they buy balloons or get free balloons at funfairs?
- Ask pupils to share their experiences of balloons at funfairs.

Activity 4

- Give each pupil a sheet of drawing paper and set out water colour and brushes around the classroom.
- Ask pupils to use the materials to paint 12 circles on the drawing paper.
- Ask pupils to draw with crayon a string from each circle so that there are 12 balloons.

4.6 The hungry pirate



Suggested duration

40 minutes

Objectives

Compare quantities of 11 and 12.

Required resources

- lollipops
- Additional:
worksheet to compare quantities of 11 and 12.

Compare quantities of 11 and 12

Activity 1

- Ask 12 pupils to come to the front of the class and stand in a line. Give another pupil, 11 lollipops and ask him/her to distribute them to the 12 pupils.
- Ask, 'Did every pupil get a lollipop?', 'How many pupils did not get a lollipop?'
- Elicit that 11 pupils got lollipops and 1 pupil did not. Explain that there is 1 fewer lollipop than pupils.
- Ask pupils to repeat after you '1 lollipop fewer'.

Activity 2

- Ask pupils to describe the picture in Activity 4.6. Read the instruction, 'Colour the buns on the tray.'
- Ask pupils to point to and colour the buns.
- Read the instruction, 'Fill in the blank.'
- Read the sentence, 'The pirate is hungry and wants to eat 12 buns.' Ask pupils to point to the pirate.
- Count together the buns on the trays. (11)
- Elicit that 11 should be written in the space and ask pupils to write it.
- Read with the pupils, 'The cooks have 1 bun less.'

Additional activities

Activity 3

- Give each pupil with Worksheet 7 to compare quantities of 11 and 12. It could show 12 hens and 11 eggs. Ask pupils to match each hen with an egg.
- Ask 'Did every hen lay an egg?'

4.7 A gift



Suggested duration

40 minutes

Objectives

Sequence numbers from 1 to 12.

Required resources

- flashcards of numbers 1 to 12
- Additional:
Join-the-dots worksheets

Key terms

Christmas gift

Sequence numbers from 1 to 12

Activity 1

- Revise the sequence of numbers from 1 to 11 by asking what number comes after 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 respectively. Show flashcards of numbers 1 to 11 in random order and ask pupils to arrange the numbers in the correct sequence. Ask pupils to recite the sequence of numbers from 1 to 11.
- Place the flashcards of numbers 1 to 11 on the board in sequence. Show the number 12 flashcard and ask where it should be placed. (after 11) Ask pupils to recite the numbers 1 to 12 in sequence two or three times.
- Revise writing number 12 by asking pupils to draw the number 12 in the air with their index finger.

Activity 2

- Ask pupils to describe the picture in Activity 4.7.
- Read the sentence, 'Sania receives a Christmas gift.'
- Read the instruction 'Join the numbers in order from 1 to 12 to complete the picture.'
- Ask pupils to point to Sania and ask questions to check understanding of the context.
- Ask pupils to recite the numbers 1 to 12 in order as they join the dots to trace the teddy bear. Help pupils who need further guidance by asking, 'Which number comes next?' as they complete the activity.

Additional activities

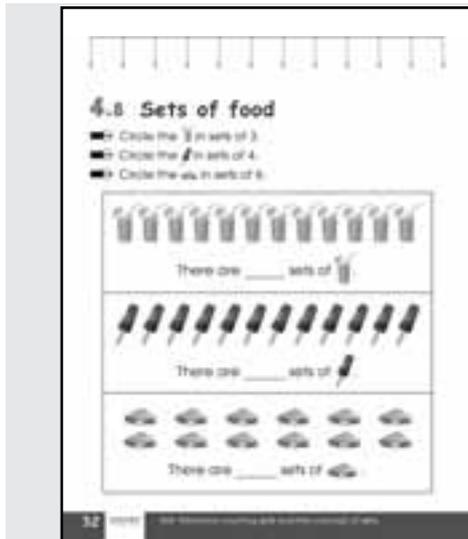
Activity 3

- Ask pupils if they have received Christmas presents.
- Ask pupils to describe the best Christmas presents they have received.

Activity 4

- Give out join-the-dots worksheets using numbers from 1 to 12.
- Pupils practise joining the dots to form a picture.
- Encourage pupils to make their own worksheets for their classmates to complete by drawing pictures and adding dots numbered from 1 to 12.

4.8 Sets of food



Suggested duration

40 minutes

Objectives

Reinforce counting skills and the concept of sets.

Required resources

- 12 lollipops
- Additional:
worksheets to classify sets

Reinforce counting skills and the concept of sets

Activity 1

- Set out 12 lollipops at the front of the class and ask 3 pupils to come to the front of the class.
- Instruct the 3 pupils to each take an equal number of lollipops.
- Encourage them to discuss how many each should get. The other pupils may also offer their suggestions.
- If pupils do not know, distribute one lollipop to the first pupil, 1 to the second and 1 to the third in turn until all 12 lollipops have been given out.
- Ask the pupils how many lollipops each of them has. (4) Explain that each has a set of 4 lollipops. Ask pupils to repeat after you 'set of 4'.
- Repeat the activity with groups of 4 and 6 pupils.

Activity 2

- Ask pupils to describe the picture in Activity 4.8.
- Read the first instruction, 'Circle the orange juice in sets of 3.'
- Ask pupils to draw a circle around every 3 glasses of juice and to count the number of sets.

- Read with the pupils “There are 4 sets of orange juice”.
Read the second instruction, ‘Circle the ice lollies in sets of 4.’
- Ask pupils to draw a circle around every 4 ice lollies, and to count the number of sets.
- Read with the pupils, ‘There are 3 sets of ice lollies.’
- Read the third instruction, ‘Circle the sandwiches in sets of 6.’
- Ask pupils to draw a circle around every 6 sandwiches, and to count the number of sets.
Read with the pupils, ‘There are 2 sets of sandwiches.’

Additional activities

Activity 3

- Give pupils a worksheet to circle the correct number of sets.
- Each question should show 12 objects to be circled in sets of 3, 4, and 6 respectively.

Introduction

In this unit, pupils are introduced to numbers to 12. By the end of the unit, pupils should be able to recognise the numbers 0 to 12, and form sequences of numbers from 0 to 12.

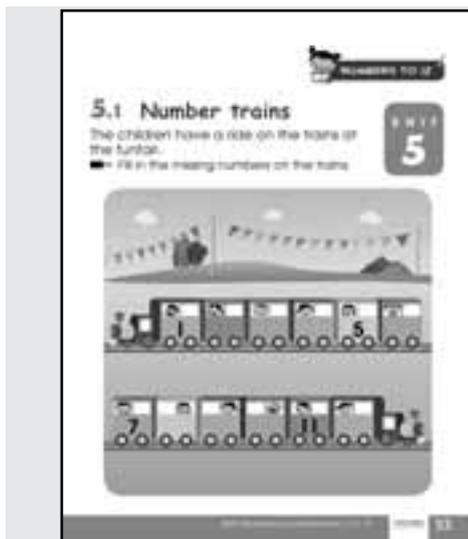


Pre-assessment activity

- Revise the numbers 0 to 12 as in previous units.



5.1 Number trains



Suggested duration

40 minutes

Objectives

Sequence numbers from 1 to 12.

Required resources

- flashcards showing 1 to 12 objects
- flashcards of numbers 1 to 12
- Additional:
 - egg cartons
 - watercolour
 - paint brushes

Sequence numbers from 1 to 12

Activity 1

- Show pupils different sets of 1 to 12 objects. Ask pupils to identify and count the objects in each set and then show the corresponding number flashcard and ask pupils to identify the number.
- Repeat for different-sized sets from 1 to 12 in sequence.

Activity 2

- Ask pupils to describe the picture in Activity 5.1
- Read the statement, 'The children have a ride on the trains at the funfair.' and ask pupils to point to the train.
- Read the instruction, 'Fill in the missing numbers on the trains.'

- Recite together the numbers from 1 to 12 in sequence as students write the missing numbers.

Additional activities

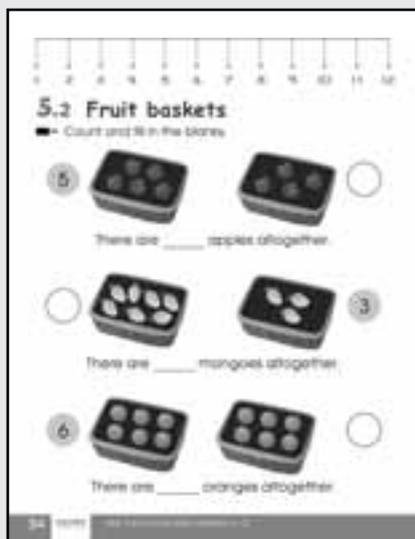
Activity 3

- Ask pupils to raise their hands if they have ridden on a train at a funfair.
- Ask them to talk about their experiences.

Activity 4

- Cut the tops off cardboard egg cartons and give each pupil twelve egg-cup sections and supply watercolours and brushes
- Ask pupils to count the egg cups and to use the paint to decorate them.
- Ask them to write the numbers 1 to 12 in sequence on their egg cartons.
- Encourage pupils to show their work to the class.

5.2 Fruit baskets



Suggested duration

1 hour

Objectives

Count and add numbers to 12.

Required resources

- basket
- fruits
- Additional:
2 dice

Key terms

apple
mango
orange

Count and add numbers to 12

Activity 1

- Place 2 baskets on a table, each containing a different number of pieces of fruit, e.g. 3 apples and 5 apples.
- Ask pupils, 'How many apples are there in the 2 baskets?'
- Count the apples from the first basket as you remove them and continue to count as you take the apples from the second basket. (8) Tell pupils there are 8 apples.

- Repeat the activity, asking pupils to count the total number of fruits in any 2 baskets in the same way. Ensure that the total number of fruits does not exceed 12.

Activity 2

- Ask pupils to describe the picture in Activity 5.2
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to identify the fruit in the first set. (apples)
- Ask them to look at the number on the left of the first set, indicating there are 5 apples.
- Count together the apples on the right. (4)
- Ask pupils to count on to find the total number of apples. (9) Read together, 'There are 9 apples altogether.'
- Teachers may also encourage pupils to use their fingers to count in sequence.
- Encourage pupils to do the remaining questions themselves.

Additional activities

Activity 3

- Ask pupils to work in pairs and give each pair 2 dice.
- Ask the first pupil to throw the 2 dice; the second pupil should count on to find the total number of dots.
- Pupils should take turns to throw and count.

5.3 Vegetable fair



Suggested duration

40 minutes

Objectives

Count up to 12.

Required resources

- different fruits
- Additional:
worksheet to count to 12.

Key terms

vegetable
brinjal
tray

Count up to 12

Activity 1

- Place different numbers of fruits on the table and ask individual pupils to count them.
- Repeat this activity for different pupils and different numbers of fruits.

Activity 2

- Ask pupils to describe the picture in Activity 5.3.
- Read the instruction, 'Count and circle the correct number of vegetables.'
- Ask pupils to point to the first vegetable and identify it.
- Ask 'How many mushrooms are there?' and count them together.(6)
- Guide pupils to circle the number 6 corresponding to the mushrooms.
- Repeat for the carrots. (9).
- Ask pupils to count the potatoes and circle the number themselves.
- Read the instruction, 'Draw 8 brinjals on the empty tray.'
- Ask pupils to draw the brinjals and check that they have drawn 8.

Additional activities

Activity 3

- Ask pupils to tell their class what their favourite vegetable is and what their least favourite is.
- Do the pupils have a common favourite vegetable?

Activity 4

- Supply pupils with a worksheet showing, for example, a scene at the market. Ensure that no more than 12 of any item are shown.
- Ask pupils to count items at the market, e.g. fish, crabs, etc.

5.4 Animals on a farm



Suggested duration

40 minutes

Objectives

Match and count different sets.

Required resources

- picture of a farm on felt board with felt animals
- Additional:
drawing paper
animal stickers

Key terms

hen duckling cow

Match and count different sets

Activity 1

- Show the picture of a farm on the overhead projector.
- Place felt animals on the board so that they are scattered over the picture randomly.
- Ask pupils questions about the numbers of animals. For example, ask, 'How many horses are there?' and count as they are removed one-by-one from the felt board.
- Arrange the horses in order and count them again to reinforce the number of horses. Repeat this activity for all the other felt animals on the board.

Activity 2

- Ask pupils to describe the picture in Activity 5.4.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to point to the hens as they count them. (6)
- Elicit that there are 6 hens and ask pupils to write 6 in the blank.
- Ask pupils to count the ducklings and cows, and fill in the blanks themselves.
- Ask other questions about the picture, e.g., 'How many houses/lily pads are there?'

Additional activities

Activity 3

- Ask pupils if they have been to a farm.
- Ask them to share with the class their favourite farm animal and why.

Activity 4

- Ask pupils to work in groups of 4 or 5 and give each group a sheet of drawing paper and animal stickers.
- Ask pupils to draw a picture based on the stickers they received, for example, farm animals or zoo animals.
- Pupils should discuss where each animal should be placed, draw areas for them to live, and stick the animals in the appropriate places.
- Ask groups to share their drawings with the class, placing emphasis on the number of each animal in their picture.

5.5 Sania's toy shelf



Suggested duration

40 minutes

Objectives

Match and count on.

Required resources

- box of marbles
- 3 empty boxes
- Additional:
worksheet to count number of toys in toy box.

Key terms

doll

teddy bear

Match and count on

Activity 1

- Place a box of marbles of 3 different colours and 3 empty boxes labelled with the names of the colours in front of the class.
- Ask 3 pupils to come and sort the marbles into the correct boxes according to colour. The 3 pupils should then count the marbles in each box.

Activity 2

- Ask pupils to describe the picture in Activity 5.2
- Ask pupils how many different toys Sania has. (2 – dolls and teddy bears)
- Read the instructions, 'Count and fill in the boxes.'
Ask pupils to point to and count the dolls.(8)
- Ask them to write '8' in the box beside the doll.
- Repeat for the teddy bears. (9)

Additional activities

Activity 3

- Ask pupils to describe where they keep their toys. Are their toys neatly displayed on a shelf? Or in a toy box? Or are they strewn around the house?

Activity 4

- Give pupils a worksheet showing toys in a toy box. There should be at least 3 different kinds of toys arranged randomly.
- Ask pupils to count how many there are of each toy.

5.6 Tariq's pencil case

5.6 Tariq's pencil case

Count and write the number of objects in Tariq's pencil case.

erasers pencils sharpeners

He buys more of each object.

Count the number of objects in each set altogether and fill in the blanks.

Tariq now has _____ erasers.
Tariq now has _____ pencils.
Tariq now has _____ sharpeners.

Suggested duration

1 hour

Objectives

Count on in sets to add.

Required resources

- stationery in 2 different pencil cases
- Additional:
worksheets to count in sets to add

Key terms

pencil case
eraser
sharpener

Count on in sets to add

Activity 1

- Place 2 pencil cases in front of the class, each containing different numbers of objects.
- Ask 1 pupil to come to the front of the class and count the pencils in the 2 pencil cases as he/she removes them from the case.
- Repeat the activity with other pupils and different items.

Activity 2

- Ask pupils to describe the picture in Activity 5.6.
- Read the instruction, 'Count and write the number of objects in Tariq's pencil case.'
- Point to the erasers and ask pupils to count them.(4)
- Ask pupils to write '4' in the box below the erasers.

- Repeat for the pencils (5) and sharpeners. (3)
- Read the statement, 'He buys more of each object.'
- Read the instruction, 'Count the objects in each set altogether and fill in the blanks.'
- Ask pupils to find the total number of erasers, starting from 4 and counting on 5, 6.
- Read together, 'Tariq now has 6 erasers.'
- Repeat with the pencils. (7)
- Ask pupils to count the sharpeners themselves.

Additional activities

Activity 3

- Ask pupils to talk about the items in their pencil case.
- Share with the class how many items of stationery there are in their pencil cases.

Activity 4

- Give pupils a worksheet to count in sets to add.
- Give pupils sets of identical objects and instruct pupils to find the total number of objects in each set.

5.7 Jugglers



Suggested duration

40 minutes

Objectives

Count on in sets to add.

Required resources

- 3 sets of objects
- Additional:
worksheet with a picture of 3 children
ice cream stickers

Key terms

juggler

Counting on in sets to add

Activity 1

- Show the class 3 sets of similar objects. For example, 3 sets of marbles of different colours, 3 sets of pencils, etc.

- Ask 3 pupils to come to the front of the class and take one set of objects each.
- The first pupil counts the objects (e.g. marbles) in his hands. E.g. 1, 2, 3.
- The second pupil should continue counting the marbles in his hands. E.g. 4, 5, 6, 7, 8.
- The third pupil continues in the same way. E.g. 9, 10, 11, 12.
- Repeat the activity with other sets of objects and different pupils.

Activity 2

- Ask pupils to describe the picture in Activity 5.2
- Read the instruction, 'Fill in the blank.'
- Ask pupils to point to the first clown and count the balls he is juggling. (2)
- Continue to count using the balls the second, and then the third clowns are juggling. (3 -7; 8 -11)
- Read together, 'The 3 jugglers have 11 balls altogether.'

Additional activities

Activity 3

- Give each pupil a worksheet showing 3 children and stickers of ice creams, e.g. 9 stickers.
- Pupils should arrange the stickers so that the 3 children are holding the ice-creams. Pupils may arrange the stickers in any order.
- Ask the pupils to find the total number of ice creams by counting on.

5.8 A party



Suggested duration

40 minutes

Objectives

Match items to quantities.

Required resources

- different sweets
- Additional:
worksheet to match items to quantities

Match items to quantities

Activity 1

- Scatter a variety of sweets on the table and ask 5 pupils to come to the front of the class.
- Tell the 5 pupils, 'Take a lollipop,' and each should try to take a lollipop.
- Repeat with e.g. chocolates and marshmallows.
- At the end of the activity, allow the pupils to identify the sweets of which there are not enough.
- Explain that this is because the number of that sweet does not match the number of children.

Activity 2

- Ask pupils to describe the picture in Activity 5.2
- Read the question 'Is there enough food for my friends?' Ask pupils to point to the food and the friends to ensure they understand the context.
- Read the instruction, 'Tick the correct answers.'
- Ask pupils to look at the cupcakes and match them to the children by asking them to point to a child and a cupcake with their left and right hands respectively.
- Ask pupils to decide whether the numbers of children and cupcakes are the same. (yes)
- Repeat the activity for the drinks and the mangoes.

Additional activities

Activity 3

- Ask pupils to describe a party they have been to.
- Was there enough food for everyone?

Activity 4

- Give pupils a worksheet to match items to quantities. It can show a set of e.g. 8 cats in the centre and sets of different items that cats like can be placed at the sides, e.g. 8 balls of yarn, 5 mice and 7 bowls of milk.
- Instruct pupils to tick the set in which there is enough for all the cats. (yarn)

Introduction

In this unit, pupils are required to look back at the concepts they have learnt 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.



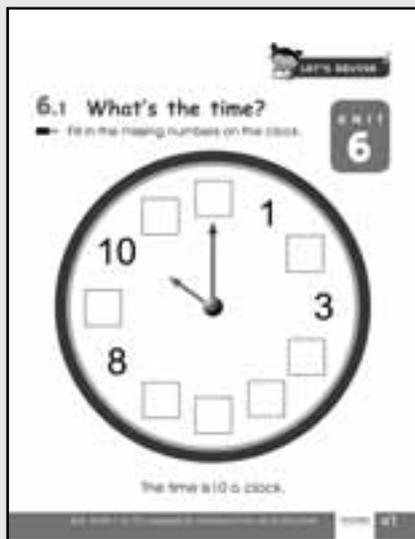
Pre-assessment activity

Recall with pupils the activities they have carried out in the previous five units and the concepts they have learnt from them. These include numbers from 0 to 10; comparison using the terms 'more', 'fewer', 'most' and 'fewest'; numbers 11 and 12, and counting to 12 in sequence

Use flashcards to revise these topics and ask pupils to identify sets of up to 12 classroom objects and to compare different sets using the target vocabulary.



6.1 What's the time?



Suggested duration

40 minutes

Objectives

Write 1 to 12 in sequence.
Introduce the clock and time.

Required resources

- clock with minute and hour hands
- Additional:
 - paper plates
 - crayons and markers
 - cardboard minute and hour hands
 - split pin fasteners

Key terms

clock
time

Write 1 to 12 in sequence; introduce the clock and time

Activity 1

- Show the students a clock. Point to each number in turn and ask pupils to identify it.
- Point out that the numbers on a clock face run in sequence from 1 to 12.

- Explain that each number represents an hour. Also explain that the shorter hand is the hour hand, and that it takes one hour for it to move from one number to the next.
- Using a clock with movable hands, point the minute hand to 12, while moving the hour hand to 1 (say 1 o' clock), then to 2 (say 2 o' clock), then to 3 (say 3 o' clock) and so on.
- Explain that the longer hand is the minute hand and when it points to 12 we do not have to count any minutes.

Activity 2

- Ask pupils to describe the picture in Activity 6.1.
- Read the instruction, 'Fill in the missing numbers on the clock.'
- Ask pupils to recite the number sequence 1 to 12.
- If necessary, guide pupils to fill in each of the missing numbers on the clock face by asking pupils, 'What comes after ...?'
- Read the statement, 'The time is 10 o' clock.'
- Point out to pupils that the minute hand is pointing to 12 and the hour hand is pointing to 10.

Additional activities

Activity 3

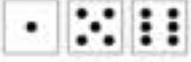
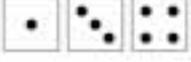
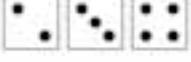
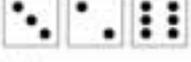
- Ask pupils to talk about where they display their clocks at home.
- How many clocks do the pupils have at home?

Activity 4

- Give each pupil a paper plate, crayons and markers, cardboard minute and hour hands and a fastener.
- Ask pupils to work on the underside of the plate and demonstrate on the board as they write 12 at the top of the plate, 6 at the bottom, and then the numbers 3 and 9 in the correct places. Then help them to add the other numbers in the correct places.
- Ask pupils to decorate their clock face using the crayons and markers.
- If not already done, make holes in the centre of the plate and near the ends of the minute and hour hands.
- Help pupils to attach the hands of the clock to the face using the fasteners.
- Encourage pupils to move the hands around the clock and practise telling the time.

6.2 Dice

6.2 Dice
Count the dots and match to the correct number.

	•	• 8
	•	• 9
	•	• 10
	•	• 11
	•	• 12

Suggested duration

40 minutes

Objectives

Practise the concept of counting on to add.

Required resources

- 2 dice
- Additional:
worksheets to count on to add.

Key terms

dot

Practise the concept of counting on to add

Activity 1

- Show the pupils 2 dice.
- Throw the dice together and ask the pupils to find the total number of dots by counting on.
- Repeat the activity several times, asking volunteer student pairs to throw the dice and count.

Activity 2

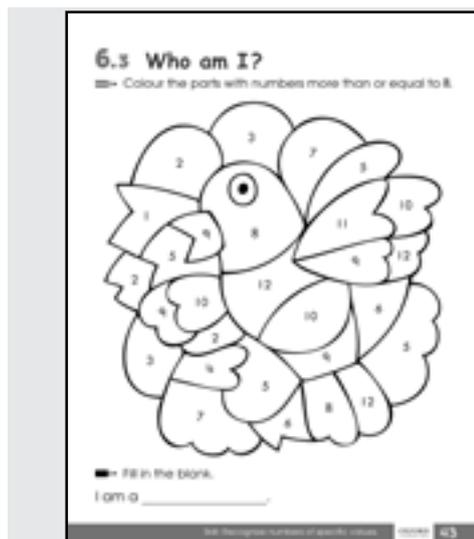
- Ask pupils to look at the picture in Activity 6.2.
- Read the instruction, 'Count the dots and match to the correct number.'
- Ask pupils to look at the first set of dice. Count with pupils the dots on the first dice. (3) Continue counting the dots on the second dice. (4, 5, 6, 7) Then, count on for the dots on the third dice. (8, 9, 10)
- Elicit that the total number of dots is 10. Ask pupils to match the first set of dice to the number 10 using a pencil and a ruler.
- Do the same for the remaining questions.

Additional activities

Activity 3

- Give pupils Worksheet 8 to practise adding by counting on.
- Ask them to count on to find the total number of objects on the 3 cards, and write the number in the box.

6.3 Who am I?



Suggested duration

40 minutes

Objectives

Recognize numbers of specific values.

Required resources

- flashcards of numbers 1 to 12
- Additional:
Colour-by-numbers worksheet

Recognize numbers of specific values

Activity 1

- Place flashcards of numbers 1 to 12 on the table.
- Ask 3 pupils to come and pick out the numbers that are more than or equal to 5. (5 to 12)
- Ask another 3 pupils to come and give them different instructions. E.g. pick out the numbers that are equal to or less than 8. (1 to 8)
- Repeat the activity with different groups of pupils and sets of instructions.

Activity 2

- Ask pupils to look at the picture in Activity 6.2. Read the instruction, 'Colour the parts with numbers more than or equal to 8.'
- Ask pupils what numbers they should colour. (8, 9, 10, 11, 12)
- Ask them to use their crayons to colour these sections
- Read the instruction, 'Fill in the blank.' Ask pupils to look at the picture and elicit that it shows a bird. Help them to write the word in the space.
- Read together, 'I am a bird.'

Additional activities

Activity 3

- Provide pupils with a worksheet similar to the one above and ask them to colour spaces with specific numbers to show a picture.
- Give pupils different worksheets for further practice.

6.4 Add up!



Suggested duration

1 hour

Objectives

Understand simple addition.

Required resources

- various objects
- Additional:
drawing paper

Key terms

egg	basket
button	shirt
fish	bowl

Understand simple addition

Activity 1

- Display some objects in front of the class, for example, 5 pencils.
- Ask for a student volunteer and tell him/her, 'I want 5 more pencils'. The pupil should take 5 more pencils and put them together with the 5 pencils already on the table.
- Ask the rest of the class to count on from 5 to find the total number of pencils. (10)
- Repeat the activity with different numbers of objects.

Activity 2

- Ask pupils to describe the picture in Activity 6.4.
Read the instruction, 'Draw, count, and fill in the blanks.'
- Read the instruction in the first set, 'Draw 10 more eggs in the basket.' Ask pupils to use pencils or crayons to do this.
- Ask pupils to count on to find the total number of eggs.(12)
- Read together, 'Now there are 12 eggs.'
- Ask pupils to look at the second question. Ask how many buttons there are on the shirt. (1)
- Read the instruction, 'Draw 6 more buttons on the shirt' and ask them to draw the buttons.
- Ask pupils to count the buttons and read with them, 'Now there are 7 buttons.'
- Do the same for the question on the fish in the fish bowl.

Additional activities

Activity 3

- Ask pupils to work in pairs and give each pair a sheet of drawing paper.
- Ask the first pupil to draw a picture of the classroom to include 1 clock, 6 tables and chairs, 1 board, 3 chalks/markers by the board and 3 pencils on one of the tables. Warn the students to leave space for more items to be added.
- Ask the first pupil to pass the drawing to the second pupil, who should add 1 more clock, 6 more tables and chairs, 9 more chalks/markers by the board, and 7 more pencils on a table.
- Ask the pupils to find the total number of each of the items now.
- Ask pupils to discuss and share their drawings with the class.

New Syllabus

PRE-PRIMARY MATHEMATICS

TEACHING GUIDE

B2



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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

- Recall with pupils the activities they carried out in the previous term.
- Use picture and number flashcards to revise quantities and numbers from 1 to 12.
- Arrange the number flashcards on the board in order and ask pupils to read with you the sequence of numbers from 1 to 12.

1.1 Jump to safety



Suggested duration

40 minutes

Objectives

Count from 1 to 10.

Required resources

- flashcards showing 1 to 10 objects
- flashcards of numbers 1 to 10
- Additional:
number sequence worksheets

Key terms

frog
snake

Count from 1 to 10

Activity 1

- Show in sequence flashcards of 1 to 10 objects. Ask pupils to identify and count the objects, and show the corresponding number flashcards.
- Ask pupils to recite with you the sequence of numbers from 1 to 10.

Activity 2

- Ask pupils to look at Activity 1.1 and read the question, 'Can you save the frog from the snake?'

- Ask pupils to point to the frog and ask questions to check understanding of the context.
- Read the instruction, 'Count from 1 to 10 and fill in the missing numbers.'
- Ask pupils to recite the number sequence from 1 to 10 again and fill in the missing numbers.

Additional activities

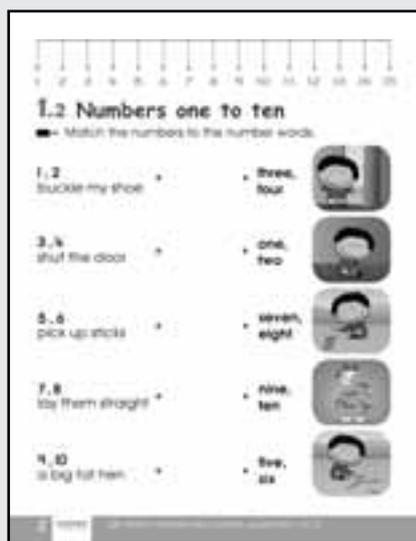
Activity 3

- Ask pupils if they have seen a snake eat a frog in e.g. a documentary.
- Explain that in nature, frogs are a source of food for snakes.

Activity 4

- Give out missing number worksheets and ask pupils to fill in the missing numbers themselves.

1.2 Numbers one to ten



Suggested duration

40 minutes

Objectives

Match numbers and number words from 1 to 10.

Required resources

- flashcards of numbers 1 to 10
- flashcards of number words

Key terms

buckle
door
straight
hen

Match numbers and number words from 1 to 10

Activity 1

- Show a flashcard of number 1. Ask pupils to spell the number word. (O-N-E). Show the number word flashcard and place both flashcards together on the board.
- Repeat this activity for all numbers and number words from 1 to 10.
- When all the pairs of flashcards are on the board, point to each number in turn and ask pupils to spell the corresponding number words.

Activity 2

- Ask pupils to look at Activity 1.2.
Read the instruction, 'Match the numbers to the number words.'

- Read together, '1, 2 buckle my shoe.'
- Ask pupils to spell one and two. Ask pupils to match, '1, 2 buckle my shoe' to 'one, two.' Elicit that the picture beside 'one, two' shows a boy buckling his shoe.
- Ask pupils to match the rest of the numbers to the number words.
- Call out a number and ask pupils to point to the corresponding picture on the right.

Additional activities

Activity 3

- Ask pupils to form groups of 5 and ask each group to present the above number rhyme to the class.
- Each pupil should present two numbers. Encourage them to act out the rhyme creatively.
- Ask pupils to vote on which group presents the rhyme most creatively.

1.3 My pets



Suggested duration

40 minutes

Objectives

Count up to 12.

Required resources

- flashcards of different numbers of objects
- Additional:
worksheet to colour the correct number of things

Count up to 12

Activity 1

- Show a flashcard of a set of objects and ask the pupils to identify and count the items.
- Repeat the activity for different-sized sets of items.

Activity 2

- Ask pupils to describe the picture in Activity 1.3.
- Read the instruction, 'Count and circle the correct answers.'
- Ask pupils to identify the animals in the first set. (fish)
- Ask pupils to point to each fish as they count them. (11)

- Elicit that they should circle the number 11 and ask them to do this.
- Ask pupils to identify and count the animals in the other sets, and circle the correct number for each.

Additional activities

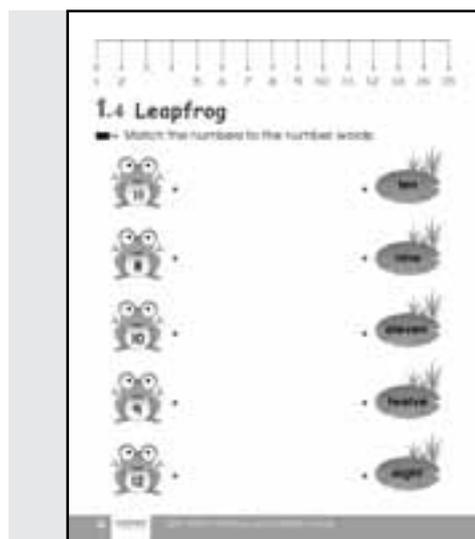
Activity 3

- Ask pupils to talk about their pets.
How many of each pet do they have?

Activity 4

- Give pupils a worksheet showing sets of items and ask them to colour a given number of items. For example, colour 5 of a set of 10 fish.

1.4 Leapfrog



Suggested duration

40 minutes

Objectives

Match numbers and number words.

Required resources

- flashcards of numbers 1 to 12
- flashcards of number words
- Additional:
sets of cards with numbers and number words 1 to 12.

Match numbers and number words

Activity 1

- Ask for two student volunteers. Give 1 pupil the set of number cards from 1 to 12 and the other the set of number words from one to twelve.
- Ask them to shuffle the cards.
- On the count of 3, ask both pupils to show a card from their decks to the class.
- Instruct the pupils to call out 'match' if the number and number words match. If this is the case, the cards should be placed on the table.
- Continue until all the cards have been matched and placed on the table.
- Repeat the activity with different pairs of pupils.

Activity 2

- Ask pupils to describe the picture in Activity 1.4.
- Read the instruction, 'Match the numbers to the number words.'
- Ask pupil to point to the first frog and elicit that it shows number 11. Ask them to spell eleven.
- Tell pupils to match the frog with 11 to the lily pad that shows eleven.
- Ask pupils to complete the rest of the activity themselves.

Additional activities

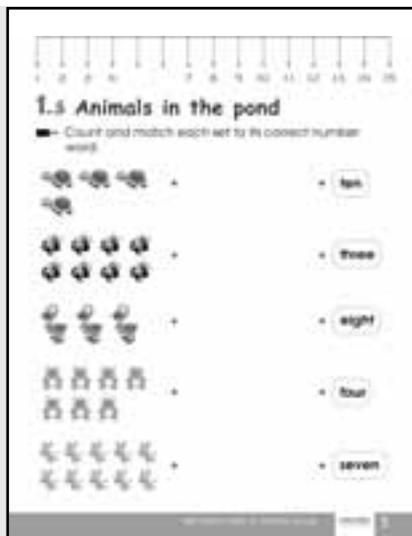
Activity 3

- Ask pupils if they have seen frogs in ponds.
- Ask pupils to raise their hands if they have seen a frog jump on a lily pad.
- Ask pupils to describe how the frogs jump from one lily pad to another.

Activity 4

- Ask pupils work in pairs and give each pair a set of 1 to 12 number and word flashcards. Ask the pupils to shuffle the cards and place them face-down on the table.
- Pupils take turns to turn 2 cards over; if they match, that pupil keeps both cards. If they do not match, they should be returned face-down with the rest of the cards.
- Pupils take turns to turn over cards to match them. The player with the most cards at the end of the round wins.

1.5 Animals in the pond



Suggested duration

40 minutes

Objectives

Match sets to number words.

Required resources

- flashcards of sets of items
- flashcards of number words
- Additional:
worksheets to colour sets corresponding to number words

Match sets to number words

Activity 1

- Ask for 2 student volunteers. Give 1 pupil the flashcards showing sets of 1 to 12 items. Give the other pupil the flashcards of number words one to twelve.
- Ask both pupils to shuffle their cards.
- Continue as for Activity 1 in Unit 1.4.

Activity 2

- Ask pupils to look at Activity 1.5.
Read the instruction, 'Count and match each set to its correct number word.'
- Ask pupils to identify and count the animals in the first set. (4 tortoises)
- Ask them to use a pencil and ruler to match the set of 4 tortoises to the word four.
- Repeat for the 8 fish.
- Ask pupils to complete the rest of the matching themselves.

Additional activities

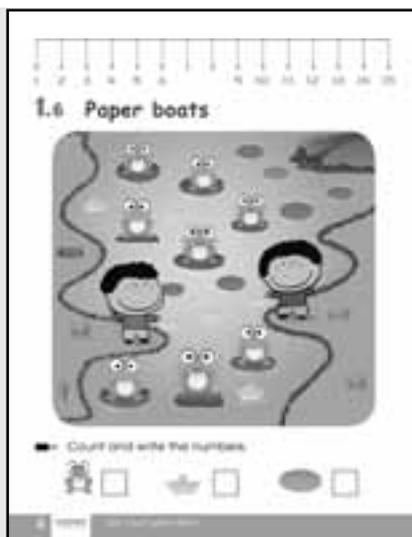
Activity 3

- Talk about pond animals.
- Ask pupils to name their favourite and least favourite pond animals, and give reasons.

Activity 4

- Give pupils a worksheet showing sets of objects and number words.
- Ask them to colour the number of objects in each set shown by the number word.

1.6 Paper boats



Suggested duration

40 minutes

Objectives

Count given items.

Required resources

- picture of children fishing in a pond
- Additional:
drawing paper (enough for all pupils in the class)

Count given items

Activity 1

- Show on the overhead projector a picture of children fishing in a pond.
- Ask questions about the picture, for example, 'How many children are there? How many fish are in the pond? How many fishing rods are there? How many children have caught fish?'

Activity 2

- Ask pupils to describe the picture in Activity 1.6.
- Read the instruction, 'Count and write the numbers.'
- Point to the first picture and elicit that it is a frog. Ask pupils to count the frogs in the picture. (8)
- Ask them to write number '8' in the box beside the frog.
- Repeat for the 6 paper boats.
- Ask pupils to count the number of lily pads themselves.

Additional activities

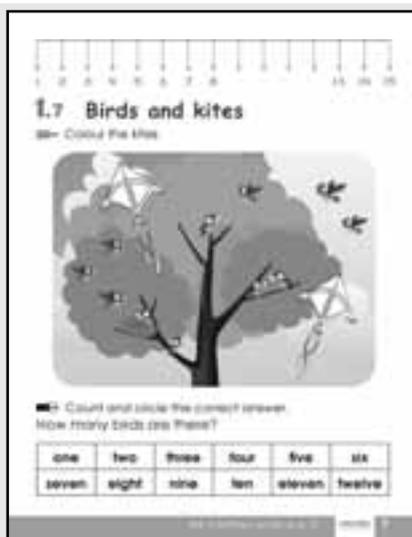
Activity 3

- Ask pupils to raise their hands if they know to fold paper boats.
- Ask a pupils who knows to demonstrate to the class.
- If pupils do not know, teachers should demonstrate how to fold paper boats.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw a picture of a pond. They should include 3 swans, 4 ducks, 5 ducklings, and 9 frogs in the drawing.

1.7 Birds and kites



1.7 Birds and kites

30- Count the kites

Count and circle the correct answer.
How many birds are there?

one	two	three	four	five	six
seven	eight	nine	ten	eleven	twelve

Suggested duration

40 minutes

Objectives

Counting in words up to 12.

Required resources

- large stickers
- Additional:
worksheet to circle the correct number of things

Key terms

kite
bird

Counting in words up to 12

Activity 1

- Stick a few large stickers around the class. Some should be obvious and a few partially hidden.
- Give each student a piece of paper and ask them to look around and count the stickers in the class.
- Ask pupils to write their answer as a number word on the paper, and hold it up.
- Check how many pupils have the correct answer and that spelling is correct.

Activity 2

- Ask pupils to look at the picture in Activity 1.7.
- Read the instruction, 'Colour the kites.' Ask pupils to point to the kites and colour them.
- Read the instruction, 'Count and circle the correct answer.'
- Read the question, 'How many birds are there?'
- Ask pupils to point to the birds as you count them together and elicit that they should circle eleven.
- Ask them to circle the correct word.
- Check that the pupils have completed the activity correctly.

Additional activities

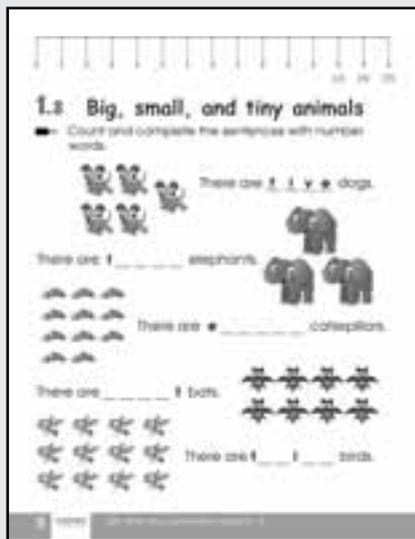
Activity 3

- Ask pupils if they have seen birds nesting in trees.
- Have any of the pupils seen hatchlings in the trees?
- Ask pupils to relate their observations to the class.

Activity 4

- Give pupils a worksheet requiring them to circle numbers of objects.
- The worksheet should show different sets of objects with corresponding number words.
- Instruct pupils to circle the number of objects in each that corresponds to the number word.

1.8 Big, small, and tiny animals



Suggested duration

40 minutes

Objectives

Write and use number words to 12.

Required resources

flashcards of different numbers of objects

Key terms

dog

elephant

caterpillar

bat

bird

Write and use number words to 12

Activity 1

- Show flashcards of different sets of objects and ask pupils to count the items and spell the number, e.g. t-h-r-e-e bags.
- Elicit the sentence e.g. 'There are three bags.'
- Repeat with different flashcards and each time encourage pupils to form a complete sentence.

Activity 2

- Ask pupils to look at Activity 1.8.
- Read the instruction, 'Count and complete the sentences with number words.'
- Guide pupils through the first example of the 5 dogs. Point out that the answer is f-i-v-e.
- Do the same for the 3 elephants and read together, 'There are three elephants.'
- Ask pupils to complete the rest of the activity themselves.

Additional activities

Activity 3

- Ask pupils to work in teams of 4 or 5 to play a game of Guess the word.
- Write a phrase on the board with letters missing in the number word and ask a pupil from each group to quickly draw that number of things on the board.
- For example, teachers write s _ _ _ flowers. The pupil who draws seven flowers first earns one point for his/her team.
- The team with the most points at the end of the activity wins.

Introduction

In this unit, pupils are introduced to the number 13. By the end of the unit, pupils should be able to recognise the number 13 and understand the quantity of 13 through counting various objects.



Pre-assessment activity

- Use number flashcards to revise the numbers 0 to 12 or ask pupils to show the numbers using their fingers.
- Ask what number comes after 12.
- Use building blocks to introduce the number 13 as in previous units.
- Ask 13 pupils to stand at the front of the classroom and ask the pupils to count them with you. Elicit that there are 13 pupils.



2.1 A rainy day



Suggested duration

1 hour

Objectives

Recognize the number 13.
Write the number 13.

Required resources

- flashcards of 1 to 13 objects
- flashcards of numbers 1 to 13
- Additional:
 - drawing paper
 - magazine
 - glue

Recognize and write the number 13

Activity 1

- Show pupils flashcards of different sets of 1 to 13 objects. Ask them to identify and count the objects and show them the corresponding number flashcard.
- Place a flashcard of number 13 on the board and write 13 above it. Say 'thirteen' and ask pupils to repeat the word after you.
- On the board, write the number 13 again large enough for all pupils to see how it is written. Write it slowly and ask pupils to trace the number in the air with their index finger.

Activity 2

- Ask pupils to describe the picture in Activity 2.1.
- Ask pupils to point to each of the children holding an umbrella and count them together. (13)
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 13 by tracing the dotted lines.

Additional activities

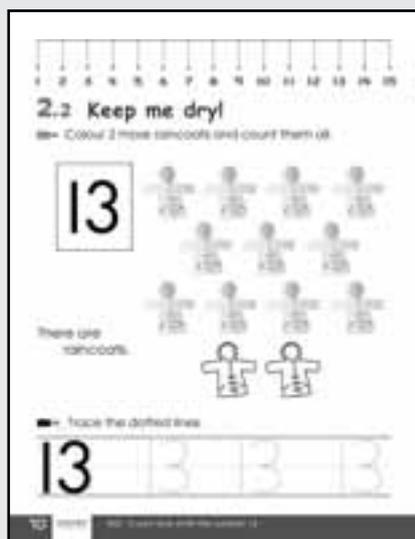
Activity 3

- Ask pupils if they like rainy days.
- Ask pupils if they have umbrellas. Do pupils usually carry umbrellas on rainy days?

Activity 4

- Ask pupils to work in groups of 4 or 5 and give each group a sheet of drawing paper, a magazine, and glue.
- Ask them to draw a large number 13 on the paper and tear up small pieces of magazine to decorate it.
- Then ask them to choose 13 pictures to stick around the number; they should belong to the same category, e.g. food or clothing items.

2.2 Keep me dry!



Suggested duration

40 minutes

Objectives

Count the number 13.
Write the number 13.

Required resources

- raincoats
- flashcard of number 13
- Additional:
worksheet to show the quantity 13

Key terms

raincoat

Counting and writing the number 13

Activity 1

- Hide 13 disposable raincoats around the classroom.
- Ask 13 pupils to come to the front of the class.

- Pretend that it is raining and ask pupils to move around room to find a raincoat each.
- When all pupils have found a raincoat, ask how many raincoats there are. Elicit that there are 13 pupils and the number of raincoats is the same as the number of pupils.
- Ask pupils to repeat 13 after you three times.
- Show pupils the flashcard of number 13 and ask them to trace it in the air with their index finger.

Activity 2

- Ask pupils to describe the picture in Activity 2.2.
- Read the instruction, 'Colour 2 more raincoats and count them all.'
- Ask pupils to point to the 2 raincoats they should colour and count all the raincoats together as pupils point to them. (13)
- Read together, 'There are 13 raincoats.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 13 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils if they use a raincoat or an umbrella when it rains.
- Discuss whether pupils prefer to use the raincoat or the umbrella?

Activity 4

- Give pupils a worksheet showing different sets of objects and ask them to circle the sets of 13.

2.3 Zareen's umbrella



Suggested duration

40 minutes

Objectives

Count in sequence from 1 to 13.
Write the number 13.

Required resources

- flashcards of sets of 1 to 13 objects
- flashcards of numbers 1 to 13
- Additional:
 - beads
 - string

Key terms

umbrella

Counting in sequence from 1 to 13 and writing the number 13

Activity 1

- Show a flashcard of 1 object and ask pupils to identify and count the object. Ask 'How many objects are there?' and elicit the response e.g. 'one object'.
- Hold up the corresponding number flashcard and ask pupils to identify the number.
- Repeat for flashcards showing sets of 1 to 13 objects in sequence.
- Finally recite together 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.

Activity 2

- Ask pupils to describe the picture in Activity 2.3.
- Read the instruction, 'Join the numbers in order from 1 to 13 to help Zareen find her umbrella.'
- Ask pupils to point to the umbrellas and explain that there are 3 umbrellas and they should join the dots to discover which belongs to Zareen.
- Ask pupils to trace the dots from 1 to 13 with a finger before they join them with pencil.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 13.

Additional activities

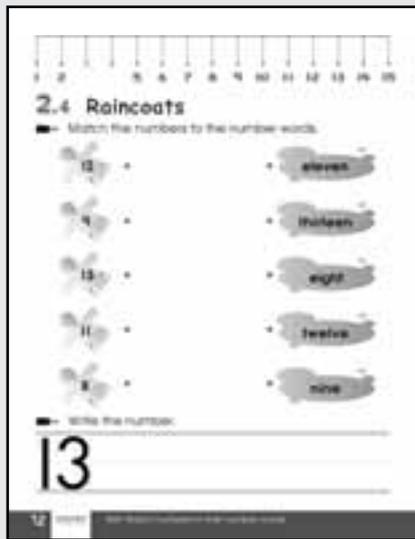
Activity 3

- Ask pupils if their umbrella has ever flown away when the wind was too strong.
- Ask pupils to relate to the class what they did when their umbrella flew away and say whether they managed to retrieve it.

Activity 4

- Arrange bowls of beads around the classroom and give each pupil a piece of string.
- Ask them to thread 13 beads to form a necklace. Ask them to count each bead as they do so.
- Tie the ends of the string together to form a necklace. Ask pupils to exchange necklaces with a partner to check that only 13 beads have been used.

2.4 Raincoats



Suggested duration

40 minutes

Objectives

Match numbers to their number words.

Required resources

- flashcards of numbers and number words
- Additional:
matching worksheet

Match numbers to their number words

Activity 1

- Scatter flashcards showing numbers and number words randomly on a table.
- Ask groups of pupils to take turns to match the numerals and number words.
- Hold up each card and revise the spelling of numbers one to thirteen.

Activity 2

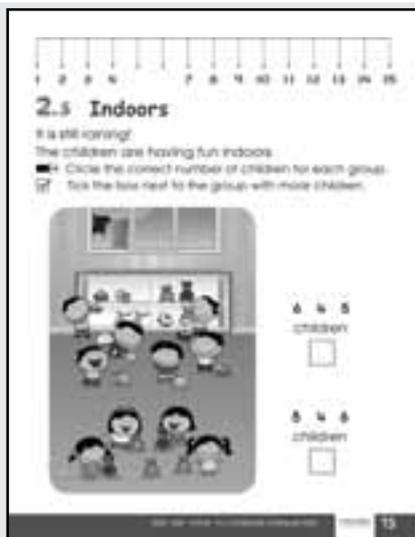
- Ask pupils to look at the picture in Activity 2.4.
- Read the instruction, 'Match the numbers to the number words.'
- Point to the first raincoat and ask pupils to spell the word. (t-w-e-l-v-e)
- Ask pupils to use a pencil and ruler to draw a line from the raincoat to the word twelve.
- Ask pupils to match the rest of the numbers to the number words themselves.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 13.

Additional activities

Activity 3

- Give each pupil a worksheet to match numbers to their number words. It should show 2 columns: numbers in the left column and number words in the right.
- Pupils should use a ruler and pencil to match the numbers and number words.

2.5 Indoors



Suggested duration

40 minutes

Objectives

Use 'more' to compare unequal sets.

Required resources

- toys
- Additional:
drawing paper

Key terms

raining
indoors

Use 'more' to compare unequal sets

Activity 1

- Arrange some toys on the table, e.g. 5 balls on one side and 7 cars on the other side.
- Ask pupils to count the balls and the toy cars.
- Match one ball to one car by placing them side-by-side, and elicit that there are more toy cars than balls.
- Ask pupils to repeat after you, 'There are more toy cars than balls.'
- Repeat the activity using different numbers of other toys

Activity 2

- Ask pupils to describe the picture in Activity 2.5.
- Read the statements, 'It is still raining! The children are having fun indoors.'
- Direct pupils' attention to the rain and ask questions to check understanding of context.
- Read the instruction, 'Circle the correct number of children for each group.'
- Count together the children in the first group. (6) Ask pupils to circle the number 6 in pencil.
- Repeat for the second group. (4)
- Read the instruction, 'Tick the box next to the group with more children.'
- Ask pupils to tick the correct box themselves.

Additional activities

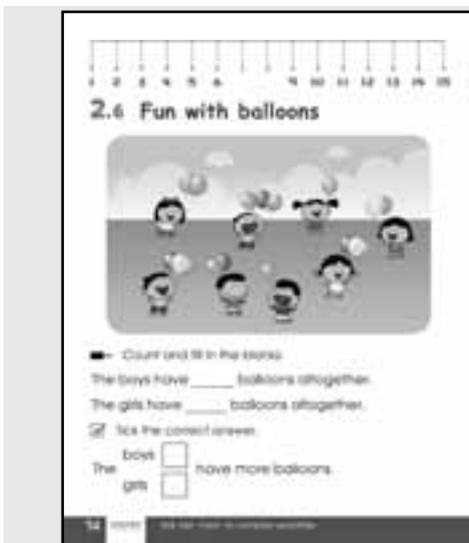
Activity 3

- Ask pupils what they do when it is raining. Do they stay indoors?
- Ask pupils to share with the class what they do indoors when it is raining.

Activity 4

- Ask pupils to work in pairs and give each pair a sheet of drawing paper.
- Show them how to divide the paper into 2 halves by drawing a line across the middle.
- Ask the first pupil to draw 5 footballs on one half of the paper.
- Ask the second pupil to draw more footballs than the first pupil on the other half of the paper.
- Check that they have completed the task correctly.

2.6 Fun with Balloons



Suggested duration

40 minutes

Objectives

Use 'more' to compare quantities.

Required resources

- lollipops
- Additional:
worksheet to use 'more' to compare quantities.

Use 'more' to compare quantities

Activity 1

- Ask six girls and six boys and come to the front of the class.
- Give each girl 2 lollipops and each boy 1 lollipop.
- Ask the girls to count how many lollipops they have altogether. The first girl should count 1, 2; the second continues 3, 4, etc. until the sixth girl counts 11, 12.
- Ask the boys to do the same. (6)
- Ask the pupils to compare the two quantities and to raise their hands if they think the girls have more lollipops.
- Ask pupils to raise their hands if they think the boys have more lollipops.

Activity 2

- Ask pupils to describe the picture in Activity 2.6.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to point to the boys and count together how many balloons the boys have altogether. (8) Read together, 'The boys have 9 balloons altogether.'

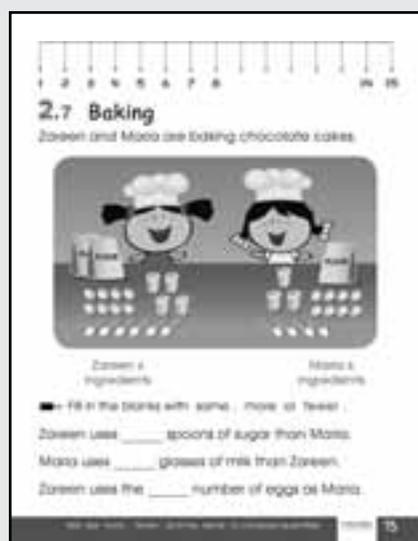
- Repeat for the girls. (8)
- Read the instruction, 'Tick the correct answer.'
- Ask pupils to raise their hands if they think the girls have more balloons. Ask pupils to raise their hands if they think the boys have more balloons. Elicit that they should tick the box beside the boys.
- Read together, 'The boys have more balloons.'

Additional activities

Activity 3

- Give each pupil a worksheet to compare quantities using 'more'.
- The worksheet should show different sets of objects and pupils should circle the sets with more objects.

2.7 Baking



Suggested duration

40 minutes

Objectives

- Use 'more', 'fewer', and 'the same' to compare quantities.

Required resources

- flashcards of different numbers of objects
- Additional:
worksheet showing 3 children, A, B, and C.

Key terms

baking
chocolate cake
sugar
milk

Using 'more', 'fewer', and the 'same' to compare quantities

Activity 1

- Show two flashcards of identical objects; flashcard A should show more objects than flashcard B.
- Ask pupils to identify and count the objects shown on each of the cards.
- Showing flashcard A, elicit that it shows more items and ask pupils to repeat the term 'more'.
- Repeat for flashcard B and the term fewer.
- Then show flashcard C that shows the same number of objects as flashcard A. Ask pupils to identify and count the items.

- Hold up flashcards A and C and elicit that the number of items on each is the same, and ask pupils to repeat the term.
- Repeat the activity with different sets of objects.

Activity 2

- Ask pupils to describe the picture in Activity 2.7.
- Read the sentence, 'Zareen and Maria are baking chocolate cakes.'
- Ask pupils to point to Zareen and Maria.
- Read the instruction, 'Fill in the blanks with 'same', 'more' or 'fewer'.'
- Ask pupils to count the spoons of sugar Zareen uses. (6)
- Ask pupils to count the spoons of sugar Maria uses. (4)
- Elicit that they should write 'more' in the space, and read the sentence together.
- Repeat for the glasses of milk, (fewer) and the eggs. (same)

Additional activities

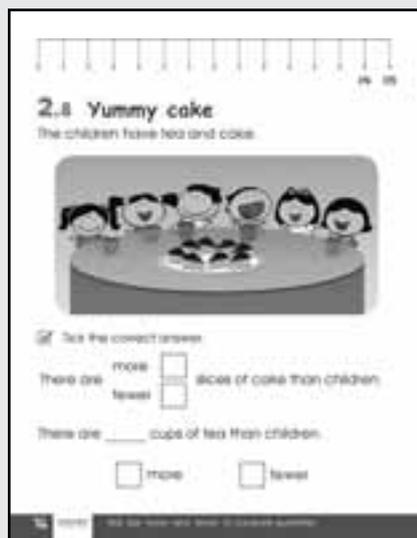
Activity 3

- Ask pupils to raise their hands if they know how to bake.
- Ask pupils to relate to the class their baking experiences.

Activity 4

- Give pupils a worksheet showing 3 children, A, B and C and ask them to draw 3 cakes in front of child B.
- Ask pupils to draw cakes for children A and C, following the instructions: A has more cakes than B. C has fewer cakes than A. B and C have the same number of cakes.

2.8 Yummy cake



Suggested duration

40 minutes

Objectives

Use 'more' and 'fewer' to compare quantities.

Required resources

- 8 oranges
- 5 apples
- Additional:
worksheets to compare quantities

Key terms

tea
cake

Use 'more' and 'fewer' to compare quantities

Activity 1

- Place eight oranges and five apples on the table and ask six pupils to come to the front of the class.
- Ask each of them to take an orange. Each should have one orange with two remaining.
- Elicit the sentence, 'There are more oranges than pupils.'
- Ask each pupil to take a apples. One pupil will have no apple.
- Elicit the sentence, 'There are fewer apples than pupils.'

Activity 2

- Ask pupils to describe the picture in Activity 2.8.
- Read the statement, 'The children have tea and cake.'
- Ask pupils to point to the tea and cake and read the instruction, 'Tick the correct answer.'
- Count together the children, (6) and the cakes. (8) Elicit that there are more cakes than children.
- Ask pupils to tick the correct box and read together, 'There are more slices of cake than children.'
- Repeat for the cups of tea and read together, 'There are fewer cups of tea than children.'

Additional activities

Activity 3

- Ask pupils to share with the class their teatime experiences.
What do they usually eat and drink for tea?

Activity 4

- Give pupils a worksheet to compare quantities using 'fewer' or 'more'.

Introduction

In this unit, pupils are introduced to the number 14. By the end of the unit, pupils should be able to recognise the number 14, and understand the quantity of 14 through counting various objects.

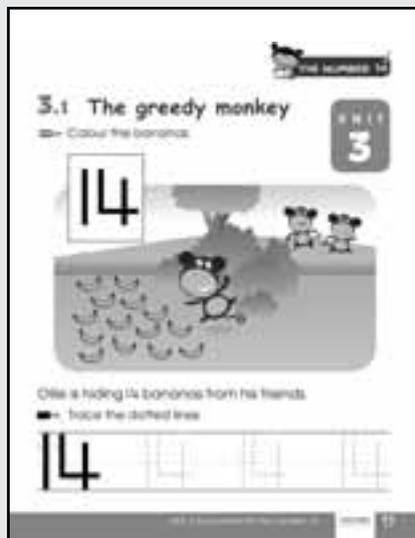


Pre-assessment activity

- Use flashcards to revise numbers 0 to 13 or ask pupils to use their fingers to show these numbers as in previous units.
- Ask what number comes after 13.
- Use building blocks to introduce number 14 as in previous units .
- Ask 14 pupils to stand at the front of the classroom and count them together. Ask how many pupils there are. Pupils should be able to say that there are 14 pupils.



3.1 The greedy monkey



Suggested duration

1 hour

Objectives

Count the number 14.
Write the number 14.

Required resources

- flashcards showing 1 to 14 objects
- flashcards of numbers 1 to 14
- Additional:
 - drawing paper
 - black beans
 - glue

Key terms

banana

Counting and writing the number 14

Activity 1

- Use flashcards showing sets of 1 to 14 objects and corresponding number flashcards in sequence to revise counting from 1 to 14, as in previous units.
- Place the flashcard of number 14 on the board and write 14 above it. Say fourteen and ask pupils to repeat this after you.

- Write the number 14 again, large enough for pupils to see how it is written, and ask them to use their index fingers to trace the number 14 in the air as you write.

Activity 2

- Ask pupils to describe the picture in Activity 3.1.
Read the instruction, 'Colour the bananas.'
- Ask pupils hold up a yellow pencil and then use it to colour the bananas.
- Read the statement, 'Ollie is hiding 14 bananas from his friends.'
- Count the bananas together. (14)
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 14 by tracing the dotted lines.

Additional activities

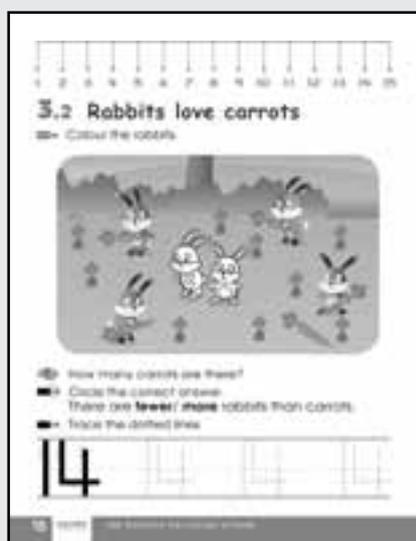
Activity 3

- Ask pupils if they have seen monkeys eating bananas.
Have any of the pupils ever fed bananas to monkeys?

Activity 4

- Ask pupils to work in groups of 4 or 5 and give each group a sheet of drawing paper, glue and some black beans.
- Ask the pupils to draw a large number 14 on their paper and glue black beans inside the number.

3.2 Rabbits love carrots



Suggested duration

40 minutes

Objectives

Reinforce the concept of fewer.

Required resources

- carrots
- flashcard of number 14
- Additional:
worksheet to show the quantity 14 and reinforce the concept of fewer

Key terms

rabbit
carrot

Reinforce the concept of fewer

Activity 1

- Put out 14 carrots and ask 13 pupils to come to the front of the class.
- Ask each pupil take a carrot and elicit that there is 1 carrot left.
- Ask pupils to count the carrots and repeat 14 three times.
- Show the flashcard of number 14 and ask pupils to trace the number in the air with their finger.
- Point to the remaining carrot and elicit the sentence 'There are fewer children than carrots.'

Activity 2

- Ask pupils to describe the picture in Activity 3.2.
Read the instruction, 'Colour the rabbits.'
- Ask pupils to point to the 2 rabbits that they need to colour and then colour them.
Read the question, 'How many carrots are there?'
- Count the carrots together as pupils point to them in turn. (14)
Ask pupils to count the rabbits. (6) Elicit that there are fewer rabbits than carrots.
- Read the instruction, 'Circle the correct answer.' Ask pupils to do this.
- Read together, 'There are fewer rabbits than carrots.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing 14 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have rabbits at home.
- Ask pupils to share what they feed their rabbits with. Do they feed their rabbits carrots?

Activity 4

- Give pupils a worksheet which shows different sets of objects and ask them to circle the sets of 14.
- Ask them to colour the sets in which there are fewer than 14.

3.3 Kitty's treasure



Suggested duration

40 minutes

Objectives

Counting forwards to 14 for simple addition.

Required resources

- marbles
- 10 small boxes or paper cups
- Additional:
simple addition worksheet

Key terms

cat
fish

Counting forwards to 14 for simple addition

Activity 1

- Place 14 marbles on the table and count them together.
- Place 10 boxes/paper cups on the table.
- Ask pupils if there are enough boxes for one marble to be placed in each box/paper cup.
- Ask pupils to count the boxes/cups and give their responses.
- Demonstrate that there are fewer boxes/cups than marbles by placing one marble in each. Elicit that there are 4 marbles left.
- Point to the boxes/cups and say '10 marbles'. Point to the 4 extra marbles and say, 'There are 4 marbles.'
- Guide pupils to say, 'There are 10 marbles and 4 more.'

Activity 2

- Ask pupils to describe the picture in Activity 3.3.
- Read the instruction, 'Trace the cat.' Ask pupils to use a pencil to trace the cat.
- Read the instruction, 'Colour it.' Ask pupils to colour the cat.
- Read the instruction, 'Count and fill in the blank.' Ask pupils to count the fish.
- Count together as pupils point to the fish in the basket. Then count the fish outside the basket.
- Read together, 'Kitty has 14 fish altogether.'
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 14.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have cats at home.
- Ask pupils what their cats eat. Do they feed their cats fish?

Activity 4

- Give pupils Worksheet 9 to count more than 10 items.
- Explain that they should group the objects into a set of 10 and then count the remaining objects to find the total number.

3.4 Mother hen

3.4 Mother hen

Trace the 3 chicks.

Count the number of caterpillars and fill in the blank.
Mother hen brings _____ caterpillars.
She needs **one more** to have 14 caterpillars for her chicks.

Write the number.

14

Suggested duration

40 minutes

Objectives

Understand the concept of 'one more'.

Required resources

- Additional:
star stickers

Key terms

chick
caterpillar
hen

Understand the concept of 'one more'

Activity 1

- Ask a pupil to come to the front of the class and elicit that there is one pupil.
- Say, 'I want 1 more pupil.' Ask another pupil to come to the front. Elicit that there are now 2 pupils.
- Repeat the activity, each time emphasizing the phrase 'one more'.

Activity 2

- Ask pupils to describe the picture in Activity 3.4.
- Read the instruction, 'Trace the 3 chicks.' Ask pupils to trace the 3 chicks.
- Read the instruction 'Count the caterpillars and fill in the blank.'
- Count together as pupils point to the caterpillars. (13)
- Read together 'Mother hen brings 13 caterpillars.'

- Read the statement, 'She needs one more to have 14 caterpillars for her chicks.'
- Ask pupils to repeat 'one more' after you 3 times.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 14.

Additional activities

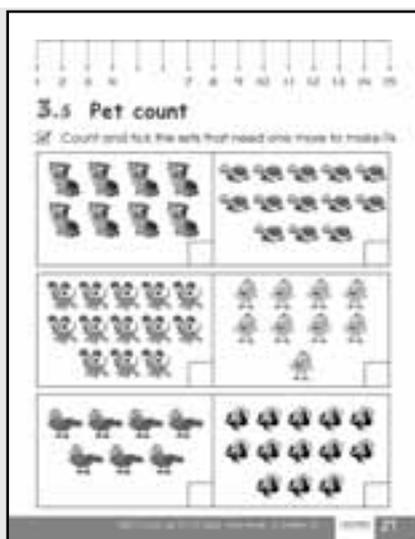
Activity 3

- Ask pupils to raise their hands if they have chickens at home.
- Ask pupils what they feed their chickens with. Do they feed their chickens worms?

Activity 4

- Place a large sheet of blue paper in front of the class.; explain that it is the night sky.
- Give each pupil one star sticker. Ask the first pupil to stick the sticker on the paper and say 'There is 1 star at night.'
- Ask for one more star and invite a second student to stick a sticker on the paper. Say 'There is one more star'.
- Repeat this until all pupils have pasted their stars on the 'night sky'.

3.5 Pet count



Suggested duration

40 minutes

Objectives

Count up to 14.

Add 'one more' to make 14.

Required resources

- felt animals
- felt board
- Additional:
drawing paper

Counting up to 14, adding 'one more' to make 14

Activity 1

- Display a felt board in front of the class and fix 13 identical felt animals on it.
- Explain that you want 14 animals and ask a pupil to add one more animal to make 14.
- Repeat the activity with different felt animals and pupils, each time making sets of 14.

Activity 2

- Ask pupils to describe the picture in Activity 3.5.
Read the instruction, 'Count and tick the sets that need one more to make 14.'
- Ask the pupils to count with you the cats in the first set. (8). Elicit that 9 comes after 8 and explain that one more than 8 is 9.
- Show flashcards of 9 and 14, and elicit that because they are not the same, pupils should not tick the first set.
- Repeat with the second set, (13) and elicit that one more would make 14.
- Ask pupils to tick the box corresponding to the tortoises.
- Encourage pupils to complete the exercise themselves.

Additional activities

Activity 3

- Ask pupils to work in pairs and give each pair a sheet of drawing paper.
- Ask one pupil to draw 13 objects of his/her choice and then pass the paper to the second pupil.
- Ask the second pupil to draw 'one more' of the same object.
- Ask pupils to find the total number of objects and then write a big number 14 on their drawing.
- Pupils should share their drawings with the class.

3.6 Mousetrap



Suggested duration

40 minutes

Objectives

Count to 14.

Required resources

- flashcards showing 1 to 14 objects
- flashcards of numbers 1 to 14
- Additional:
small coloured stones

Key terms

mouse
trap
cheese

Count to 14

Activity 1

- Show flashcards of sets of 1 to 14 objects and ask pupils to identify and count the objects. Show corresponding number flashcards.
- Repeat for sets of 1 to 14 objects in sequence.
- Showing each of the number cards in sequence again, recite with the pupils 1 to 14.

Activity 2

- Ask pupils to describe the picture in Activity 3.6.
- Read the statement, 'Nadir wants to lead the mouse to the trap.'
- Ask pupils to point to the mouse and the trap to check contextual comprehension.
- Read the instruction, 'Count the pieces of cheese and fill in the box.'
- Explain that the mouse will follow the pieces of cheese to get to the trap.
- Counting from the piece closest to the mouse, ask pupils to point to each piece as you count them together.(14)
- Read together, 'There are 14 pieces of cheese.'

Additional activities

Activity 3

- Ask pupils to raise their hands if their parents have ever set a mouse trap.
- Ask why mouse traps are used.
- Ask pupils to relate their experiences to the class.

Activity 4

- Tell pupils the story of Hansel and Gretel and how they lay a trail of pebbles so that they could find their way home.
- Give two pupils 14 coloured stones and ask them to role-play Hansel and Gretel. Explain that they are standing at their 'house' and the end of the classroom is the 'woods'. Ask them to lay a stone trail from their 'house' to the 'woods'.
- The other pupils should count the stones that they drop. (14)

3.7 Mice and cheese



Suggested duration

40 minutes

Objectives

Count and match corresponding sets.

Required resources

- flashcards of different number of objects
- Additional:
matching flashcards

Key terms

mice
cheese

Count and match corresponding sets

Activity 1

- Display flashcards showing the same number of two different objects, e.g. 14 flowers and 14 butterflies.
- Ask pupils to count the objects. Elicit that the number of each is the same, and explain that the cards are a match.
- Repeat with another pair of matching sets.
- Repeat with a pair of non-matching sets, e.g. 11 cats and 13 fish. Elicit that they do not match.
- Repeat the activity with different pairs of cards.

Activity 2

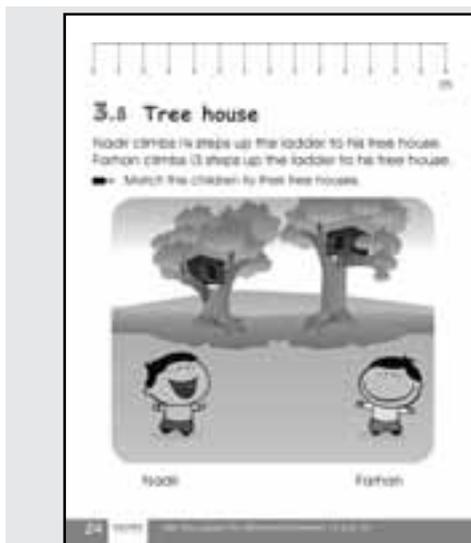
- Ask pupils to look at Activity 3.7.
- Read the instruction, 'Count and match each set of mice to the exact number of pieces of cheese.'
- Ask pupils to count the first set of mice. (11)
- Ask pupils to count each set of pieces of cheese to see which set has 11. (the fourth set)
- Ask them to use a pencil and ruler to match the first set of mice to the fourth set of pieces of cheese.
- Ask pupils to complete the exercise themselves.

Additional activities

Activity 3

- Ask pupils to form groups of 4 or 5 and give each group a set of matching flashcards, e.g. different –sized sets of cats and mice, cups and saucers, etc. to play a matching game.
- Ask the pupils to shuffle the cards and spread them out, face down on the floor.
- The pupils take turns to turn over two cards. If the sets match, that pupil keeps the cards. If the sets do not match, the cards are turned back and placed in their original positions.
- The game ends when all the cards have been matched.
The pupil with the most cards wins.

3.8 Tree house



Suggested duration

40 minutes

Objectives

Recognize the difference between 13 and 14.

Required resources

- flashcards showing 13 or 14 objects
- flashcards of number 13 or 14
- Additional:
worksheets to compare quantities

Key terms

step ladder tree house

Recognize the difference between 13 and 14

Activity 1

- Show a flashcard of 13 objects and ask pupils to identify and count the objects. (13)
- Hold up a flashcard of number 13 and ask pupils to repeat 13 3 times.
- Repeat with a flashcard of 14 objects.
- Show different flashcards of either 13 or 14 objects and ask pupils to identify and count them.

Activity 2

- Ask pupils to describe the picture in Activity 3.8.

- Read the statements, 'Nadir climbs 14 steps up the ladder to his tree house.', and 'Farhan climbs 13 steps up the ladder to his tree house.'
- Ask pupils to point to the ladders and to the tree houses to check contextual understanding.
- Read the instruction, 'Match the children to their tree houses.'
- Count together the steps in the first ladder, (13) and in the second ladder. (14)
- Guide pupils to match the children to the correct tree houses.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have tree houses or have played in a tree house.
- Ask pupils to relate their experiences of tree houses to their classmates.

Activity 4

- Give pupils a worksheet to compare quantities of 13 and 14. It should show different sets of objects. Ask pupils to tick or circle the set that contains 13 objects.

Introduction

In this unit, pupils are introduced to the number 15. By the end of the unit, pupils should be able to recognise the number 15, and understand the quantity of 15 through counting various objects.



Pre-assessment activity

- Revise the numbers 0 to 14 as in previous units.
- Introduce the number 15 as in previous units.



4.1 Life in the ocean



Suggested duration

1 hour

Objectives

Recognize the number 15.
Write the number 15.

Required resources

- flashcards showing 1 to 15 objects
- flashcards of numbers 1 to 15
- Additional:
 - drawing paper
 - non-toxic water colours

Key terms

sea creature

Recognizing and writing the number 15

Activity 1

- Use picture and number flashcards in sequence, as in previous units, to introduce the number 15.

Activity 2

- Ask pupils to describe the picture in Activity 4.1. Read the instruction, 'Colour the 2 fish.'
- Ask pupils to point to the 2 fish that are not coloured and use crayons to colour them.
- Count the sea creatures together. (15)
- Read the statement, 'There are 15 sea creatures in this picture.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 15 by tracing the dotted lines.

Additional activities

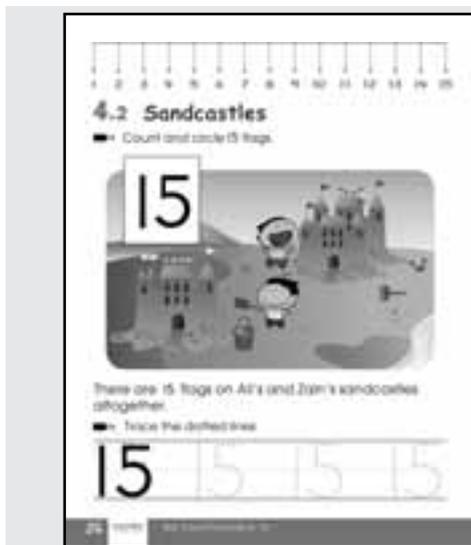
Activity 3

- Ask pupils to raise their hands if they have seen sea creatures.
- Where have they seen them? What is their favourite sea creature?
- Ask pupils to relate their experiences to the class.

Activity 4

- Give each pupil a sheet of drawing paper and set out watercolour paint around the classroom.
- Ask pupils to draw a large number 15 on their paper.
- Ask pupils to paint their hands with the water colour to make handprints. They should print both hands and then make one more hand print on the paper.
- Ask pupils to count the fingerprints they have made. Elicit that there are 15 altogether.

4.2 Sandcastles



Suggested duration

40 minutes

Objectives

Count forwards to 15.

Required resources

- paper flags
- flashcard of number 15
- Additional:
worksheet to show the quantity 15.

Key terms

flag sandcastle

Count forwards to 15

Activity 1

- Line up 15 flags in or outside the classroom. Number the first flag 1 and mark a start line before it.
- Ask pupils to start walking from the start line, following the path shown by the flags.
- Ask pupils to count aloud the flags as they walk past them. (1 to 15)
- Ask pupils to repeat 15 three times.
- Show pupils the flashcard of number 15 and ask them to trace the number in the air with a finger.

Activity 2

- Ask pupils to describe the picture in Activity 4.2.
- Read the instruction, 'Count and circle 15 flags.'
- Count the flags with the pupils and ask them to circle each flag as they count it.
- Read the statement, 'There are 15 flags on Ali's and Zain's sandcastles altogether.'
- Read the instruction 'Trace the dotted lines.' Ask pupils to practise writing the number 15 by tracing the dotted lines.

Additional activities

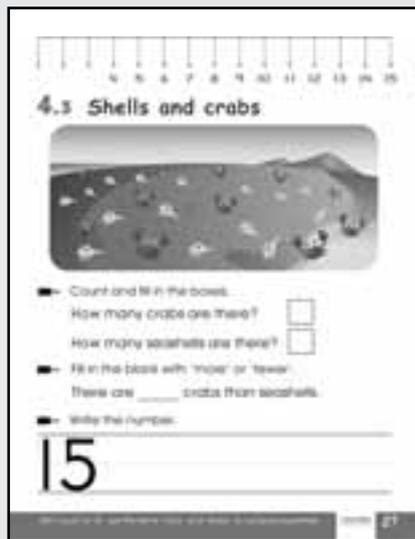
Activity 3

- Ask pupils to raise their hands if they have built sandcastles.
Ask pupils to share their experiences of building sandcastles. What is the biggest sandcastle that they have built?

Activity 4

- Give pupils a worksheet which shows different sets of objects and ask them to identify and colour the sets of 15.

4.3 Shells and crabs



Suggested duration

40 minutes

Objectives

Count to 15.

Use the terms 'more' and 'fewer' to compare quantities.

Required resources

- picture of a seashore
- Additional:
drawing paper

Key terms

crab seashell

Counting to 15; using the terms 'more' and 'fewer' to compare quantities

Activity 1

- Show a picture of seashore on the overhead projector and ask questions about it, e.g., 'How many turtles/turtle eggs/crabs are there?', etc.
- Using the picture, practise using the terms more and fewer to compare quantities.

Activity 2

- Ask pupils to describe the picture in Activity 4.3.
- Read the instruction, 'Count and fill in the boxes.'
- Read the question, 'How many crabs are there?'
- Ask pupils to point to the crabs and then count them together. (9)
- Elicit that 9 should be written in the blank and ask pupils to do this.
- Read the question, 'How many seashells are there?'
- Repeat for the seashells. (15)
- Read together 'There are fewer crabs than seashells.'
- Read the instruction 'Write the number.' Ask pupils to practise writing the number 15.

Additional activities

Activity 3

- Ask pupils to work in groups of 3. Give each group a sheet of drawing paper and ask them to draw a picture of a park.
- Ask one pupil to draw 12 children; ask the second to draw more balloons than children. Encourage the pupils to use their imaginations: one child could hold more than 1 balloon or some balloons may have flown away in the sky.
- Ask the third pupil to draw fewer trees than children.
- Ask pupils to complete their drawings and share them with the class, checking that there are appropriate numbers of balloons and trees.

4.4 Turtle eggs



Suggested duration

40 minutes

Objectives

Count on to 15 for simple addition.

Required resources

- plastic eggs
- basket
- Additional:
worksheets for simple addition to 15

Key terms

turtle
egg
pit

Count on to 15 for simple addition

Activity 1

- Hide some plastic eggs around the class, e.g. 7.
- Place a basket of, e.g. 8 plastic eggs in front of the class and ask pupils to count them.
- Ask the pupils to find more eggs in the classroom.
- Each egg should be added to the basket as it is found, and added to the total, e.g. 9, 10 etc.
- The activity continues until all 7 eggs have been found and there are 15 eggs in the basket.
- Elicit that there are 15 eggs in the basket altogether.

Activity 2

- Ask pupils to describe the picture in Activity 4.4.
Read the instruction, 'Trace the turtle.' Ask pupils to do this.
- Read the instruction, 'Count and fill in the blank.'
- Point to the pit and ask pupils to count the eggs.(8) Read together 'There are 8 eggs in the pit.'
- Read the instruction, 'Draw 7 more in it.' Ask pupils to draw 7 more eggs in the pit.
- Ask pupils to find the total number of eggs in the pit. (15)
- Read with the pupils, 'There are 15 eggs in the pit now.'
- Read the instruction 'Write the number.' Ask pupils to practise writing the number 15.

Additional activities

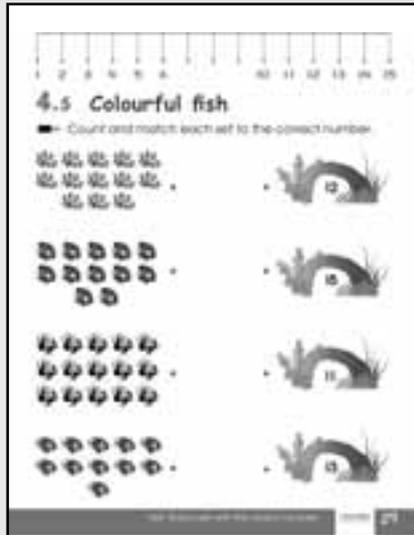
Activity 3

- Ask pupils if they have seen a turtle laying eggs, either in a documentary or in real life.
- Ask pupils to describe their observations to the class.

Activity 4

- Give pupils Worksheet 10 to practise simple addition to 15. They should draw more to show the given number.

4.5 Colourful fish



Suggested duration

40 minutes

Objectives

Match sets with the correct numbers.

Required resources

- flashcards showing different numbers of objects
- flashcards of numbers 1 to 15
- Additional:
matching worksheet

Match sets with the correct numbers

Activity 1

- Display 5 flashcards, each showing a different number of objects.
- Give 5 pupils the corresponding number cards in random order.
- The pupils should match their number card with the corresponding flashcard on the board.
- Repeat the activity with flashcards showing different numbers of objects, and different pupils.

Activity 2

- Ask pupils to describe the picture in Activity 4.5.
- Read the instruction, 'Count and match each set to the correct number.'
- Ask pupils to count the clownfish in the first set. (13) Alternatively, ask them to circle 10 clownfish and count 3 more.
- Ask pupils to use a ruler and pencil to join the first set of fish to the number 13.
- Repeat for the next set of fish, (12, or 10 +2)
- Ask pupils to complete the exercise themselves.

Additional activities

Activity 3

- Ask pupils if they have visited an aquarium.
- Ask them to describe their favourite fish.
- Do pupils know the difference between freshwater and saltwater fish? Ask pupils to do a search on the internet.

Activity 4

- Give pupils a worksheet to match numbers of objects to their corresponding numbers.

4.6 The dolphins



Suggested duration

40 minutes

Objectives

Use visual discrimination to recognize quantities.

Required resources

- picture of fish in an aquarium
- Additional:
drawing paper (enough for all pupils in the class)

Key terms

- dolphin

Using visual discrimination to recognize quantities

Activity 1

- Show pupils a picture of an aquarium with different sets of fish, and ask questions about it, e.g. 'How many red fish/sharks are there?' Show pictures of real fish to help them identify the fish.
- Ensure that pupils can identify the fish and count them correctly.

Activity 2

- Ask pupils to describe the picture in Activity 4.6.
- Read the statement, 'There are 15 dolphins.' Ask pupils to point to and count the 15 dolphins.
- Read the instruction, 'Colour 5 dolphins, black and 4 dolphins, blue.'
- Ask pupils to hold up a black crayon, count 5 dolphins, and colour them black.
- Ask pupils to hold up a blue crayon, count 4 dolphins, and colour them blue.
- Read the instruction, 'Fill in the blank.' Ask pupils to count the remaining dolphins. (6)
- Read together, 'There are 6 dolphins which are not coloured.'

Additional activities

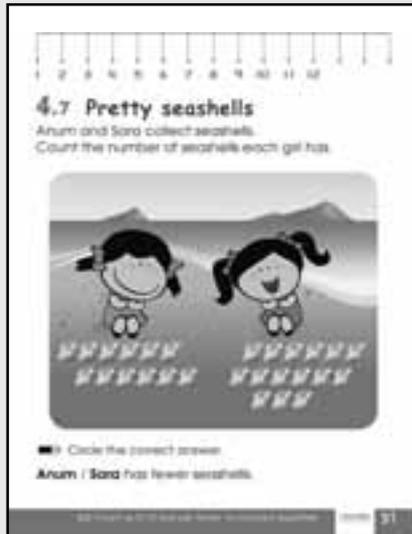
Activity 3

- Ask pupils to raise their hands if they have seen dolphins.
Ask them to share with the class why they like dolphins.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw 6 red books, 3 blue books, and 6 yellow books in any setting of their choice.
- Ask pupils to share their drawings with the class and display some of them in the classroom.

4.7 Pretty seashells



Suggested duration

40 minutes

Objectives

- Count up to 15
- use 'fewer' to compare quantities.

Required resources

- flashcards showing different numbers of objects
- Additional:
worksheet to colour the set that has fewer items

Key terms

seashell

Count up to 15 and use 'fewer' to compare quantities

Activity 1

- Hold up two flashcards showing different-sized sets of identical objects, e.g. 15 and 13 flowers.
- Ask pupils to count the flowers on each card and ask which set contains fewer flowers.
- Hold up the correct card, say fewer, and ask pupils to repeat the word 3 times.
- Repeat the activity with different flashcards.

Activity 2

- Ask pupils to describe the picture in Activity 4.7.
- Read the statement, 'Anum and Sara collect seashells.' Ask pupils to point to the seashells.
- Read the instruction, 'Count the number of seashells each girl has.'
- Ask pupils to count Anum's set of shells, (12) and Sara's set of shells. (15)
- Read the instruction, 'Circle the correct answer.'
- Elicit that Anum has fewer shells, ask pupils to circle the correct name, and read the sentence together.

Additional activities

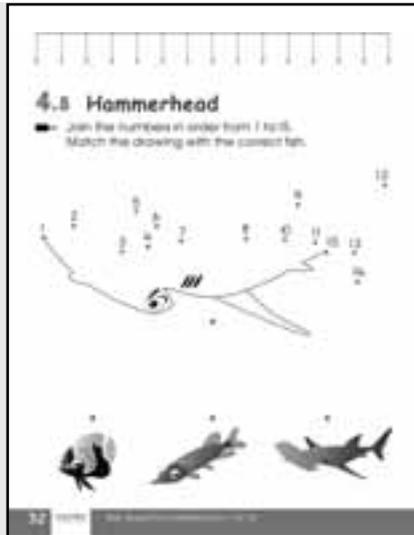
Activity 3

- Ask pupils if they collect seashells.
- Ask pupils to describe their seashell collections. How many seashells and what kinds of shells do they have?
- Encourage pupils to do a show-and-tell by bringing their collections of seashells to school.

Activity 4

- Give pupils a worksheet showing two different sets of identical objects and ask them to colour the set that contains fewer objects.

4.8 Hammerhead



Suggested duration

40 minutes

Objectives

Sequence numbers from 1 to 15.

Required resources

- flashcards showing 1 to 15 objects
- flashcards of numbers 1 to 15
- Additional:
coloured macaroni pieces

Suggested duration string

Activity 1

- Use the flashcards of 1 to 15 objects and of numbers 1 to 15 in order, to teach the sequence of numbers to 15, as in previous units.

Activity 2

- Ask pupils to look at Activity 4.8.
- Read the instruction, 'Join the numbers in order from 1 to 15.'
- Get pupils to trace the dots numbered from 1 to 15 with a finger before joining them in pencil.
- Read the instruction, 'Match the drawing with the correct fish.'
- Guide pupils to match the drawing to the hammerhead shark.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen a hammerhead shark.
- Ask pupils to search the internet for pictures or stories of hammerhead sharks and share them with the class.

Activity 4

- Give each pupil a piece of string and set out bowls of macaroni pieces around the class.
- Ask pupils to count as they string 15 macaroni pieces on their string.
- Help pupils to tie the ends of the string to form a necklace.

Introduction

Shapes can be observed all around us, in many familiar objects. It is therefore important that pupils are taught to identify basic shapes and relate them to familiar objects

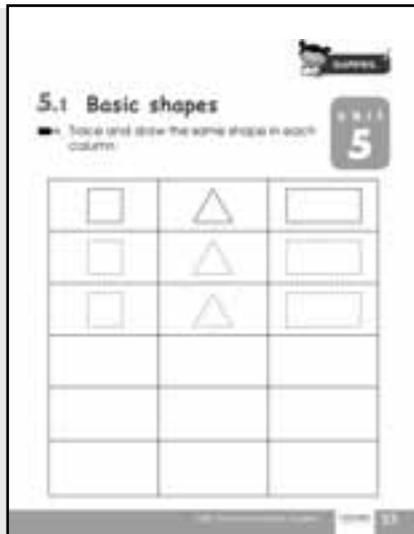
In this unit, pupils are introduced to the square, circle, triangle and rectangle. By the end of the unit, pupils should be able to recognise these basic shapes, relate them to everyday objects, and recognise halves and quarters of basic shapes.



Pre-assessment activity

- Give pupils cut-outs of squares, circles, triangles and rectangles and ask them to describe them.
- Ask some pupils to trace the shapes on the board.
- Draw each shape on the board to demonstrate how they are drawn.
- Ask pupils to move around the room or outside, and find objects that match the cut-outs of the different shapes.
- Encourage pupils to share with the class the objects that they find and say why they match the cut-outs.

5.1 Basic shapes



Suggested duration

40 minutes

Objectives

Draw some basic shapes.

Required resources

- square, rectangular or triangular shaped objects
- Additional:
 - cut-outs of shapes
 - glue
 - shape sorting worksheet

Drawing some basic shapes

Activity 1

- Display some objects that are square, rectangular or triangular.
- Pick out some square objects, e.g. a tile, book, a mirror.

- Draw a square on the board and show how each of the objects has the same shape as the square.
- Tell pupils, 'This is a square' and ask pupils to repeat it three times.
- Repeat with some rectangular objects, e.g. a ruler, a rectangular pencil case, a rectangular book.
- Repeat with some triangular objects, e.g. a triangle (musical instrument), a set-square.

Activity 2

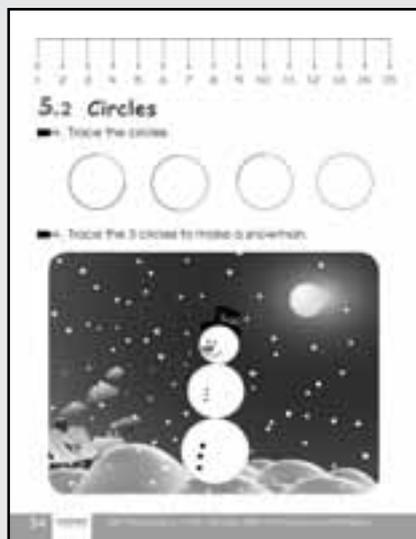
- Ask pupils to look at Activity 5.1.
- Read the instruction, 'Trace and show the same shape in each column.'
- First ask pupils to trace the shape of the square in the air with a finger, starting with the upper horizontal line. Then, ask pupils to use a pencil to trace the 2 squares.
- Ask them to use a ruler to draw 3 more squares by themselves.
- Repeat these steps to draw the triangles and rectangles.

Additional activities

Activity 3

- Give pupils some cut-outs of the basic shapes, glue, and Worksheet 11.
- Ask the pupils to sort the shapes into the different columns by gluing the cut-outs in the appropriate columns.

5.2 Circles



Suggested duration

40 minutes

Objectives

Recognize a circle.

Develop skills of drawing curved shapes.

Required resources

- circular objects
- Additional:
drawing paper
magazines
glue

Key terms

circle
snowman

Recognizing a circle and developing skills of drawing curved shapes

Activity 1

- Display some circular objects on the table, e.g. a wheel, a bottle cap, a compact disc.
- Draw a circle on the board and compare these objects with the drawing to show that they are all circular.
- Tell pupils, 'This is a circle' and ask pupils to repeat this sentence 3 times.
- Ask some pupils to come to the front of the class and roll the circular objects.
- Elicit that, unlike other shapes, circular objects can roll.

Activity 2

- Ask pupils to describe the picture in Activity 2.2.
- Read the instruction, 'Trace the circles.'
- Ask pupils to trace the quarter circle in the first diagram, the half circle in the second diagram, and three-quarters of the circle in the third diagram, and finally the whole circle in the last diagram.
- Read the instruction, 'Trace the 3 circles to make a snowman.'
- Ask pupils to trace the 3 circles with their fingers before tracing them with a pencil.

Additional activities

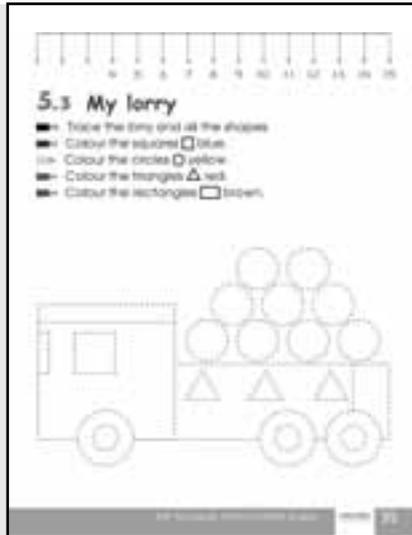
Activity 3

- Ask pupils to raise their hands if they have ever made a snowman.
- Ask pupils to share with the class how they made their snowman. How big was their snowman?
- Did they roll balls of snow to make the snowman?

Activity 4

- Ask pupils to work in groups of 4 or 5 and give each group drawing paper, a magazine, and glue.
- Ask them to find pictures of circular objects from the magazines and glue them on their paper.
- Ask pupils to share their completed work with the class.

5.3 My lorry



Suggested duration

40 minutes

Objectives

Recognize and trace basic shapes

Required resources

- cut-outs of shapes
- Additional:
drawing paper (enough for all pupils in the class)

Key terms

lorry

Recognize and trace basic shapes

Activity 1

- Ask pupils to identify cut-outs of different shapes (square, rectangle, triangle and circle). Ensure that they can differentiate between a square and a rectangle.

Vary the shapes in terms of size and colour.

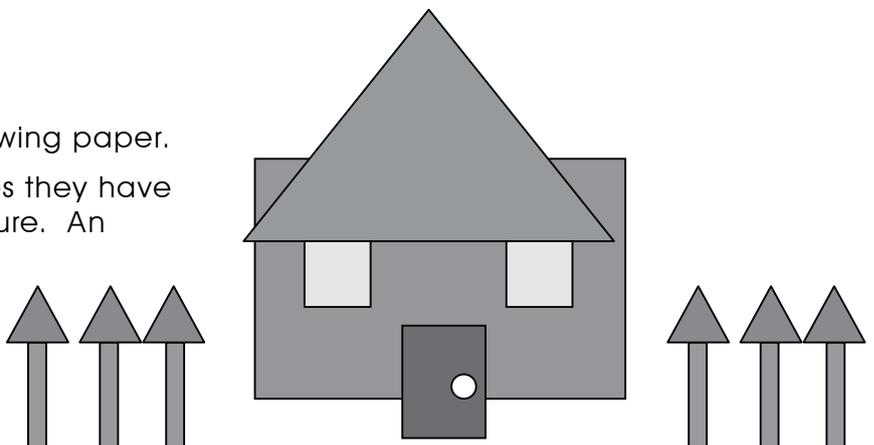
Activity 2

- Ask pupils to describe the picture in Activity 2.3.
Read the instruction, 'Trace the lorry and all the shapes.'
- Ask pupils to trace the lorry and the shapes with a finger before tracing them with a pencil.
- Read the instruction, 'Colour the squares blue.' Ask pupils to point to the squares and hold up a blue pencil before they complete the task.
- Repeat for the yellow circles, red triangles and brown rectangles.

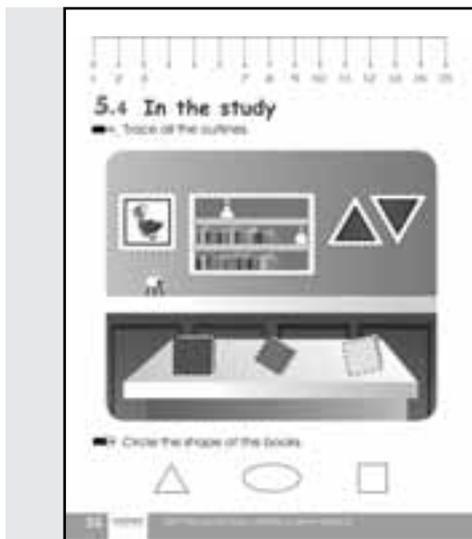
Additional activities

Activity 3

- Give each pupil a sheet of drawing paper.
- Ask them to use only the shapes they have learned about to create a picture. An example is shown here:
- Ask pupils to share their drawings with the class and display some examples in the classroom.



5.4 In the study



Suggested duration

40 minutes

Objectives

Recognize basic shapes in given objects.

Required resources

- cut-outs of shapes, including ovals
- Additional:
drawing paper

Key terms

book

Recognizing basic shapes in given objects

Activity 1

- Begin by using suitably-shaped objects to teach the oval shape as in Unit 5.1.
- Ask 4 pupils to come to the front of the class and give each of them a cut out of one of the basic shapes.
- Ask each of them to identify an object that has the same shape as the cut-out they are holding.
- The other pupils can help by pointing out objects to the pupils.
- Repeat the activity with different pupils.

Activity 2

- Ask pupils to describe the picture in Activity 2.4.
- Read the instruction, 'Trace all the outlines.'
- First, point to the picture of the duck on the wall. Ask pupils to identify the shape. (square)
- Ask pupils to trace the frame using their pencils.
- Ask pupils to point to and trace the other outlines.
- Read the instruction, 'Circle the shape of the books.'
- Ask pupils to point to the books so that they know the shape they are looking for. Point to the triangles and elicit that it is incorrect; repeat for the oval. Finally elicit that the shape of the square is correct and ask pupils to circle the square.

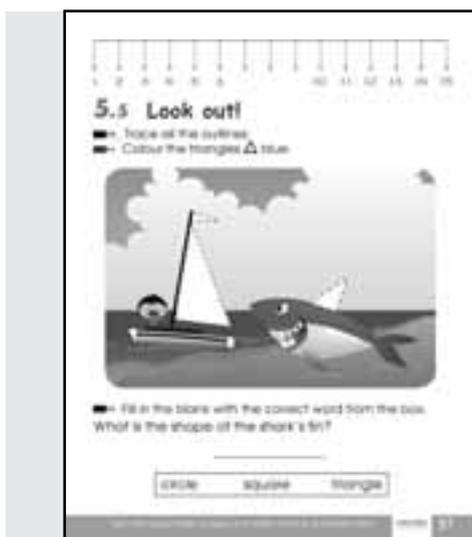
Additional activities

Activity 3

- Ask pupils to form groups of 4 or 5 and give each group a sheet of drawing paper.

- Ask pupils to draw a picture of a living room to include objects showing the basic shapes. For example, a circular clock, a rectangular notebook, a triangular table, etc. Encourage them to be creative.
- Ask pupils to share their drawings with the class and display some of their work in the classroom.

5.5 Look out!



Suggested duration

40 minutes

Objectives

Recognize basic shapes and relate them to everyday items.

Required resources

- flashcards of triangular objects
- Additional:
find the triangles worksheet

Key terms

shark's fin

Recognize basic shapes and relate them to everyday items

Activity 1

- Show pupils flashcards of everyday objects that have a triangular shape.

For example,

- Ask them to identify the shape and to name more examples of everyday things that are triangular.
- Teachers could ask pupils to search the internet for more examples.

Activity 2

- Ask pupils to describe the picture in Activity 2.5.
- Read the instruction, 'Trace all the outlines.'
- Ask pupils to point to the outlines and trace them with a finger before they use a pencil.
- Read the instruction, 'Colour the triangles blue.' Ask pupils to hold up a blue crayon before they complete the task.
- Read the question, 'What is the shape of the shark's fin?'
- Read the instruction, 'Fill in the blank with the correct word from the box.'
- Elicit that the shark's fin is a triangle and ask pupils to write 'triangle' in the blank.

Additional activities

Activity 3

- Ask pupils if they have seen sharks.
- How do they feel about sharks? Are they scared of sharks?

Activity 4

Give pupils Worksheet 12 and ask them to trace the triangle in each object.

5.6 Birthday party



Suggested duration

40 minutes

Objectives

Recognize and relate basic shapes to everyday life.

Required resources

- flashcards of different shaped objects
- 4 boxes
- Additional:
 - box
 - shape cut-outs
 - picture of objects with basic shapes

Key terms

balloon
party hat

Recognize and relate basic shapes to everyday life

Activity 1

- Place 4 boxes in front of class and label them square, rectangle, circle and triangle respectively.
- Show flashcards of objects, e.g. a triangle (musical instrument) and ask pupils to identify the shape.
- Place the flashcard into the box labelled 'triangle'.
- Repeat this for the other flashcards, classifying common objects in terms of the 4 basic shapes and ask pupils to come up to the board to complete the patterns.

Activity 2

- Ask pupils to describe the picture in Activity 2.6.
- Read the instruction, 'Trace all the outlines.' Ask pupils to use a pencil to trace all the outlines.

- Read the instruction, 'Colour the cake brown.'
- Ask pupils to hold up a brown crayon, and to complete the task.
- Repeat for the red balloons and blue party hats.
- Read the question, 'Whose birthday is it?' Elicit from the banner that it is Tariq's party and ask pupils to write his name in the blank.

Additional activities

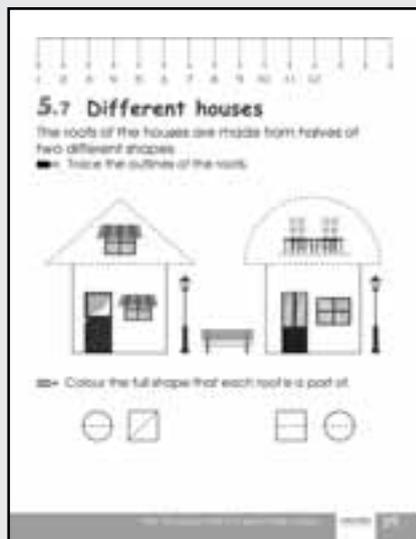
Activity 3

- Ask pupils if they go to birthday parties.
- Ask pupils to describe the things at a birthday party. Are there balloons, cakes, or biscuits?

Activity 4

- Play a game of sort the shapes.
- Divide the pupils into two groups and ask them to stand in straight lines on either side of the room.
- Prepare two boxes containing the same cut-outs of shapes and pictures of everyday objects in which the shapes are represented.
- Place the boxes in the middle of the classroom, between the two teams.
- Explain that you will name a shape, and a pupil from each team should run to their respective box and find the correct shape. That player then runs back to his team and taps the next player.
- The teacher then calls out another shape and the next pupil runs to find it.
- The game progresses with teachers calling out, e.g. 'objects with a triangular shape', etc. and pupils run to find the cut-out or picture showing that shape.
- The game ends when all the cards have been taken from the boxes.

5.7 Different houses



Suggested duration

1 hour

Objectives

Recognize half of a given basic shape.

Required resources

- cut-outs of shapes
- Additional:
matching shapes worksheets
scissors

Key terms

roof
house
half

Recognize half of a given basic shape

Activity 1

- Show cut-outs of shapes, e.g. a triangle. Fold the triangle in half and tell pupils, 'This is half a triangle.' Then, open it up again to show pupils what a whole triangle looks like.
- Do the same for the other shapes.
- Teachers may also cut the basic shapes in half and give these halves to pupils who should put them together to show how 2 halves form 1 whole shape.

Activity 2

- Ask pupils to describe the picture in Activity 2.1.
- Read the statement, 'The roofs of the houses are made from halves of two different shapes.' Ask pupils to point to the roofs and elicit the names of the two different shapes used to form the roofs.
- Read the instruction, 'Trace the outlines of the roofs.'
- Ask pupils to use ruler and pencil to outline the triangle of the first roof and the semi-circle of the second.
- Read the instruction, 'Colour the full shape that each roof is a part of.'
- Guide pupils to colour the correct shapes.

Additional activities

Activity 3

- Ask pupils to observe houses as they are walking outside.
- Ask them to observe how different one house is from another.

Activity 4

- Give pupils Worksheet 13 and scissors.
- Ask them to cut out the shapes and match them to make a rectangle, square, triangle, and circle.

5.8 Teatime



Suggested duration

40 minutes

Objectives

Recognize quarters of basic shapes.

Required resources

- cut-outs of shapes
- Additional:
complete the shapes worksheets

Key terms

tea
pizza
slice
one quarter

Recognize quarters of basic shapes

Activity 1

- Show a cut out of a circle, fold it in half and elicit that it is half a circle. Fold it again and explain that the shape is now a quarter of a circle. Tell pupils, 'This is a quarter of a circle.' Then, open it up again to show pupils what a whole circle looks like.
- Do the same for the square and rectangle.
- Teachers may also cut the basic shapes in quarters and give them to pupils who should place them together to show how 4 quarters form 1 whole basic shape.

Activity 2

- Ask pupils to look at Activity 5.8.
- Read the statements, 'Babar has some friends over for tea. Each child gets one quarter of the pizza and the cake.' Ask pupils to point to the pizza and the cake to check understanding.
- Read the instruction, 'Trace the pizza and slices of cake. Ask pupils to use a pencil to complete the task.

Additional activities

Activity 3

- Ask pupils if they have shared cakes and pizzas with their friends.
- Discuss how they shared the cakes and pizzas. Do pupils cut them into halves or quarters?

Activity 4

- Give pupils a 'complete the shapes' worksheet. It could show a quarter of an object missing or in dotted lines for pupils to trace the missing part of the object.
- Objects could include a wheel (circular) or a blackboard (rectangular).

Introduction

In this unit, pupils look back at the concepts they have learnt 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.

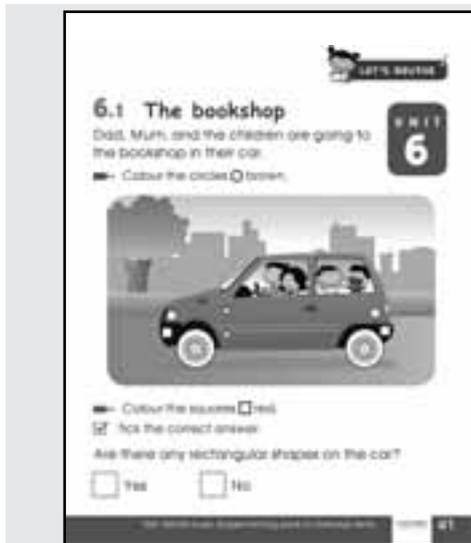


Pre-assessment activity

- Use flashcards and cut-outs to help pupils recall the activities they have carried out in the previous five units and the concepts they have learnt. These include the numbers 12 to 15, using more, fewer and the same to compare quantities, and the basic shapes: square, circle, rectangle and triangle.



6.1 The bookshop



Suggested duration

40 minutes

Objectives

Identify basic shapes forming parts of everyday items.

Required resources

- picture for pupils to identify shapes
- Additional:
construction paper
markers

Key terms

bookshop

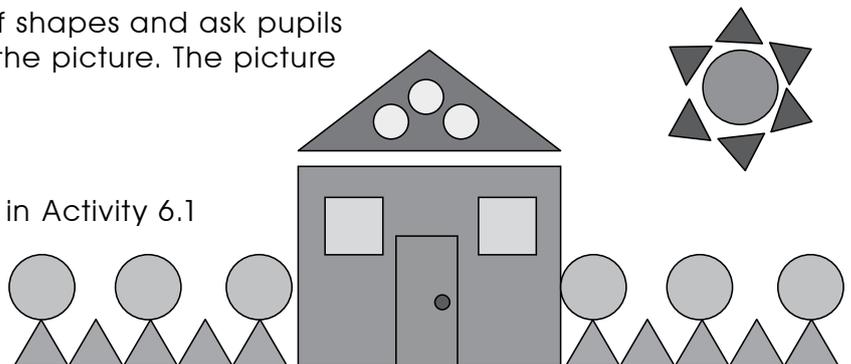
Identify basic shapes forming parts of everyday items

Activity 1

- Show pupils a picture made up of shapes and ask pupils to identify each of the shapes in the picture. The picture could look like this:

Activity 2

- Ask pupils to describe the picture in Activity 6.1
- Read the statement, 'Dad, Mum and the children are going to the bookshop in their car.'



- Read the instruction, 'Colour the circles brown.'
- Ask pupils to point to the circles to identify them, and to colour them brown.
- Repeat for the red squares.
- Read the question, 'Are there any rectangular shapes on the car?' and the instruction, 'Tick the correct answer.'
- Elicit the answer no and ask pupils to tick the correct answer.

Additional activities

Activity 3

- Ask pupils if their mother or father drives a car.
- Ask pupils to describe a car journey with their family.

Activity 4

- Give each pupil construction paper and markers and explain that they are going to make a birthday card or any good wishes card of their choice.
- Elicit that the construction paper is rectangular and demonstrate how to fold it in half.
- Ask pupils to decorate their cards by drawing basic shapes with the markers.
- Encourage pupils to share their card designs with the class, placing emphasize on the shapes used to design the cards.

6.2 Bookshelves

6.2 Bookshelves
There are many bookshelves at the bookshop.

How many books are there on each shelf?
Write the numbers.

Shelf 1 →

Shelf 2 →

Shelf 3 →

Fill in the boxes with the correct words.

There are _____ books on Shelf 2 than on Shelf 1.

There are _____ books on Shelf 2 than on Shelf 3.

Suggested duration

40 minutes

Objectives

Use the terms 'more' and 'fewer' to compare quantities.

Required resources

- building blocks
- Additional:
worksheets to identify 'more' or 'fewer'

Key terms

bookshelf
bookshop
shelf

Use the terms 'more' and 'fewer' to compare quantities

Activity 1

- Stack 10 building blocks in front of the class and ask the pupils to count them.
- Remove 2 building blocks from the stack and elicit that there are now fewer blocks.
- Ask pupils to repeat the word fewer.
- Add 7 building blocks to the stack, and elicit that there are now more blocks.
- Ask pupils to repeat the word more.

Activity 2

- Ask pupils to describe the picture in Activity 6.2.
- Read the statement, 'There are many bookshelves at the bookshop.'
- Ask pupils to point to the bookshelves to check understanding.
- Read the question, 'How many books are there on each shelf?' and the instruction, 'Write the numbers.'
- Ask pupils to count the books on shelves 1, 2 and 3, and write the correct number in each box.
- Read the instruction, 'Fill in the blanks with the correct words.'
- Ask pupils to fill in the blanks using the words 'more' or 'fewer'. Read together, 'There are more books on Shelf 2 than on Shelf 1.', and 'There are fewer books on Shelf 2 than on Shelf 3.'

Additional activities

Activity 3

- Give pupils Worksheet 14 to compare quantities using the terms more and fewer.
- The worksheet should show different-sized sets of objects.
- Ask the pupils to colour the sets that have more and fewer objects in different colours.

6.3 Where is my book?



Suggested duration

40 minutes

Objectives

Reinforce colours.

Identify the 'largest' number

Required resources

- flashcards of numbers 1 to 15
- flashcards of objects
- Additional:
worksheet to colour the one with the largest number

Reinforcing colours, identifying the 'largest' number

Activity 1

- Show a flashcard of one object and the corresponding number.
- Repeat this for numbers 1 to 15 in sequence.
Elicit that each subsequent card shows one more than the previous one.

Activity 2

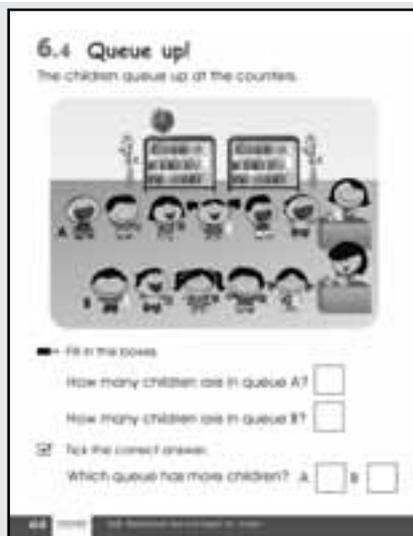
- Ask pupils to describe the picture in Activity 6.3.
- Read the statement, 'The children are looking for their books.', and the first part of the instruction, 'Colour Neha's book red.'
- Ask pupils to point to Neha and read what she says, 'Where is Art three?'
- Ask pupils to identify Art book3 and to colour it red.
- Follow the instructions and repeat for the other books.
- Read the instruction, 'Circle the book with the largest number.' Elicit that this is English 10 and ask pupils to circle it.

Additional activities

Activity 3

- Give pupils a worksheet and explain that they should colour the largest set of objects in each row.
- Instruct the pupils to write the numbers before they colour.

6.4 Queue up!



6.4 Queue up!
The children queue up at the counters.

Queue in English
Queue in English

Fill in the boxes.

How many children are in queue A?

How many children are in queue B?

Tick the correct answer.

Which queue has more children? A B

Suggested duration

1 hour

Objectives

Reinforce the concept of 'more'.

Required resources

- various objects
- Additional:
worksheet to identify the set that has more

Key terms

queue
counter

Reinforce the concept of 'more'

- Place 10 pencils on the table. Then, place 13 pens next to them so that each pencil matches a pen.
- Ask pupils to count the pencils and the pens.
- Point to the set of pens and elicit that there are more pens than pencils. Ask the pupils to repeat 'more' 3 times.
- Repeat the activity with different numbers of objects.

Activity 2

- Read the sentence, 'The children queue up at the counters.'
- Ask pupils to point to the queues and the counters to check understanding.
- Read the instruction, 'Fill in the boxes.', and the question, 'How many children are in queue A?' Count the children, (6) and ask pupils to write 6 in the box.
- Ask pupils to count the children in queue B themselves. (5)
- Read the question, 'Which queue has more children?', and the instruction, 'Tick the correct answer.'
- Ask pupils to raise their hands if they think the answer is A. If all the pupils raise their hands, ask them to put a tick in the box beside A. Otherwise, give further help as required.

Additional activities

Activity 3

- Ask pupils if they have ever queued up for something.
- Discuss how they select which queue to go to? Do they go to the queue with more people?

Activity 4

- Give pupils Worksheet 15 to draw a group that has more.
- Ask them to count the items in the first box, and then draw a set in the second box that contains more of the same item.

New Syllabus

PRE-PRIMARY MATHEMATICS TEACHING GUIDE

B3



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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

- Ask pupils to talk about the concepts that they learned in the previous term.
- Use picture and number flashcards to revise numbers 1 to 15 and ask pupils to read with you the sequence of numbers from 1 to 15.
- Show pupils familiar objects in which they can identify basic shapes. Also, prepare cut-outs of these shapes.

1.1 Snacks



Suggested duration

40 minutes

Objectives

Count from 1 to 8.

Match numbers to number words.

Required resources

- flashcards showing 1 to 8 objects
- flashcards of numbers 1 to 8
- flashcards of number words
- Additional:
worksheet to draw sets of objects corresponding to number words

Key terms

snack

Count from 1 to 8 and match numbers to number words

Activity 1

- Show flashcards of 1 to 8 objects. Ask pupils to identify and count the objects, e.g. 6 flowers.
- Show the corresponding number and number word flashcards.
Ask pupils to spell each of the number word as you hold up the number card.

Activity 2

- Ask pupils to look at Activity 1.1.
- Read the sentence, 'Naila's mother has made some snacks.'
- Ask pupils to point to and identify the snacks. (burgers, sandwiches, cupcakes, waffles, juice)
- Read the instruction, 'Count and match each set to the correct number word.'
- Ask pupils to count the burgers. (4) Ask them to spell 4 (f-o-u-r), and use a pencil and ruler to match the burgers to the word four.
- Guide the pupils to match the rest of the snacks.

Additional activities

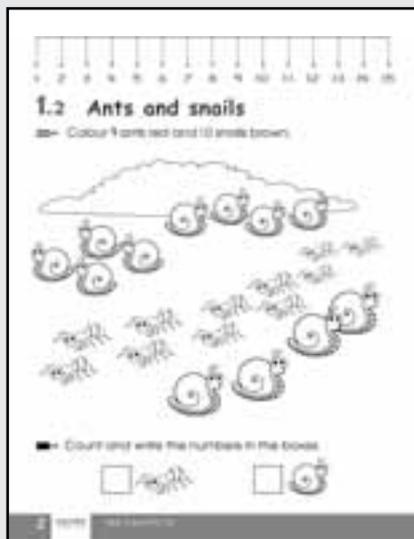
Activity 3

- Ask pupils to raise their hands if their mother makes snacks.
- Ask pupils to name their favourite home-made snack.
- Encourage pupils to bring some home-made snacks to share.

Activity 4

- Give pupils Worksheet 16 on which they should draw sets of objects to match the number words.

1.2 Ants and snails



Suggested duration

40 minutes

Objectives

Count to 12.

Required resources

- flashcards showing different numbers of objects
- Additional:
worksheet to colour a given number of things

Key terms

ant
snail

Count to 12

Activity 1

- Show flashcards of different sets of objects and ask pupils to identify and count them.
- Repeat the activity with different flashcards.

Activity 2

- Ask the pupils to describe the picture in Activity 1.2.
- Read the instruction, 'Colour 9 ants red and 10 snails brown.'
- Ask pupils to hold up a red crayon and point to one of the ants. Help them to count and colour 9 ants red.
- Repeat for a brown crayon and 10 snails.

Read the instruction, 'Count and write the numbers in the boxes.'

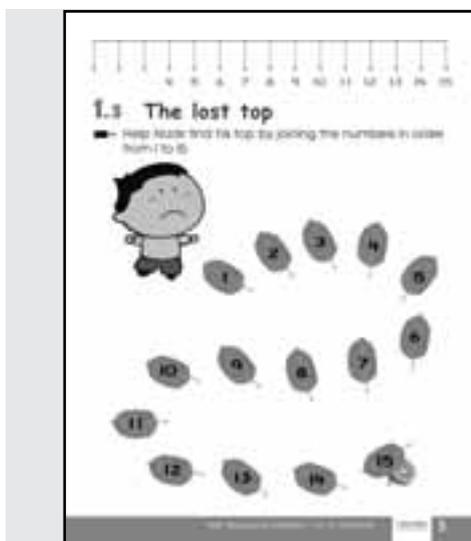
- Ask pupils to find the total number of ants, and of snails and write the numbers in the boxes.

Additional activities

Activity 3

- Give out the worksheets and ask pupils to look at the picture, and colour a given number of things, for example 8 of a set of 12 caterpillars.

1.3 The lost top



Suggested duration

40 minutes

Objectives

Sequence numbers 1 to 15 correctly.

Required resources

- flashcards showing 1 to 15 objects
 - flashcards of numbers 1 to 15
 - Additional:
number cards 1 to 15
- Key terms
top

Sequence numbers 1 to 15 correctly

Activity 1

- Show pupils flashcards of 1 to 15 objects in sequence and ask pupils to identify and count the objects.
- Ask how many objects there are in each set and after the students answer, show the corresponding number card.
- Finally, show the number cards in sequence again, and recite together 1 to 15.

Activity 2

- Ask pupils to look at Activity 1.3.
- Read the instruction, 'Help Nadir find his top by joining the numbers in order from 1 to 15.'
- Ask pupils to put a finger on leaf 1 and count together to 15 as they join the dots with a finger before they join them with a pencil.
- Ask pupils, 'What do you see behind leaf 15?' (a top)
- Point out that they have helped Nadir find his top.

Additional activities

Activity 3

- Ask pupils if they have a top.
Have they lost their tops or any other toys?
- Ask pupils to share how they eventually found their top or toy.

Activity 4

- Ask pupils to work in groups of 4 or 5.
- Spread sets of cards numbered 1 to 15 on the floor and ask the pupils to arrange them from 1 to 15.
- Note how long each group takes to complete the task; the group who take the shortest time win.

1.4 Marbles for all

1.4 Marbles for all
The children have a lot of marbles.

Haka

Mana

Zari

Nadir

Count and fill in the blanks with 'more' or 'fewer'.

Haka has _____ marbles than Zari.

Haka has _____ marbles than Zari.

Mana has _____ marbles than Nadir.

Suggested duration

40 minutes

Objectives

Compare quantities using 'more' and 'fewer'.

Required resources

- sweets
 - Additional:
worksheet to compare 'more' or 'fewer'
- Key terms
marble

Compare quantities using 'more' and 'fewer'

Activity 1

- Ask 4 pupils to come to the front of the class and give each a different number of sweets. e.g. 3:11:15:8.

Ask them to count their sweets and tell the class how many they have.

- Form different sentences and ask pupils to repeat them, for example,

D has more sweets than A.

(name) has fewer sweets than B.

B has fewer sweets than C.

C has more sweets than D.

D has more sweets than A.

D has fewer sweets than B.

Activity 2

- Ask the pupils to describe the picture in Activity 1.4.
- Read the sentence, 'The children have a lot of marbles.' Ask pupils to point to the bags of marbles.
- Read the instruction, 'Count and fill in the blanks with 'more' or 'fewer'.
- Ask pupils to count the marbles each child has and write the correct numbers in the boxes.
- Ask pupils to compare the numbers of marbles Nadir and Zain have.
- Elicit that 'fewer' should be written in the blank. Ask pupils to write this and read together, 'Nadir has fewer marbles than Zain.'
- Ask pupils to complete the other 2 questions themselves and read the sentences together.

Additional activities

Activity 3

- Give out Worksheet 17 showing different-sized sets and ask pupils to circle the set that has 'more' or 'fewer'.

1.5 Land and sea animals.



Suggested duration

40 minutes

Objectives

- Classify objects according to given criteria. Count.

Required resources

- flashcards showing animals with different numbers of legs
- Additional: worksheet to classify land and sea animals

Key terms

sea creature
land animal

Classify objects according to given criteria, and count

Activity 1

- Show pupils flashcards of animals and ask them to count each animal's legs, e.g. a bird (2), a lion (4), etc.
- Repeat with flashcards of different animals.
- Show a picture of a snail and elicit that it has no (0) legs. Repeat with pictures of fish and a seahorse.

Activity 2

- Ask the pupils to describe the picture in Activity 1.5.
- Read the instruction, 'Circle the animals with 4 legs.'
- Ask the pupils to count the cat's legs (4) and guide them to circle the cat.
- Ask them to count the snail's legs (0) and elicit that they should not circle the snail.
- Ask pupils to work independently to count the other animals' legs and circle those with 4 legs.
- Read the instruction, 'Count and fill in the blanks.'
- Help pupils to identify and count all of the sea creatures. Ask them to write the number in the blank.(4)
- Repeat for the land animals. (5). Note – snails can belong to either set.

Additional activities

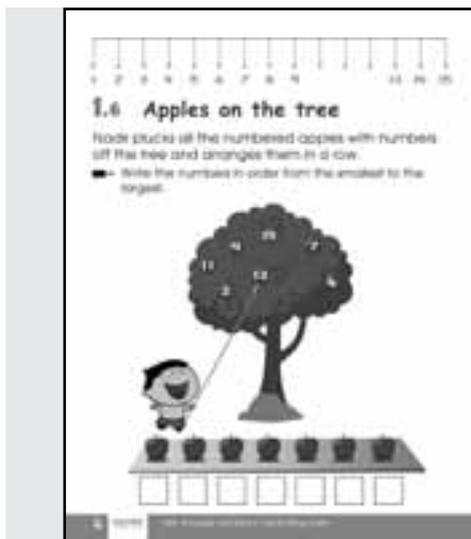
Activity 3

- Allow pupils to use the internet to explore the number of legs an animal has.
- Help pupils to print out some pictures to share with the class.

Activity 4

- Give pupils a worksheet to classify land animals and sea creatures.
- The worksheet should have 2 columns with the headings 'land animals' and 'sea creatures'. Provide pictures of both land animals and sea creatures below the table.
- Ask pupils to place the animals in the correct columns.

1.6 Apples on the tree



Suggested duration

40 minutes

Objectives

Arrange numbers in ascending order.

Required resources

- flashcards of number 1 to 15
- Additional:
worksheet to arrange numbers in ascending order

Key terms

apple

Arrange numbers in ascending order

Activity 1

- Place flashcards numbered 1 to 15 randomly on a table.
- Ask a few pupils to arrange them in order on the board.
- Congratulate the students on having arranged the cards in ascending order and explain that this means from smallest to largest.
- Hold up card number 1, say 'smallest', and ask the pupils to repeat the word.
- Hold up card number 15, say 'largest', and ask pupils to repeat the word.

Recite together 1 to 15 in sequence.

Activity 2

- Ask the pupils to describe the picture in Activity 1.6.

- Read the statement, 'Nadir plucks all the apples with numbers off the tree and arranges them in a row.'
- Ask pupils to point to each of the numbered apples on the tree to check comprehension.
- Read the instruction, 'Write the numbers in order from the smallest to the largest.'
- Teachers could write the number sequence 1 to 15 on the board or leave the flashcards for the pupils to refer to.
- Ask pupils to tell you which of the apples has the smallest number. (2) and ask them to write 2 in the first box.
- Ask pupils to identify the numbered apple that comes next. (4) Ask them to write '4' in the second box.
- Help pupils to complete the whole sequence of ascending numbers (2, 4, 7, 9, 11, 13, 15)

Additional activities

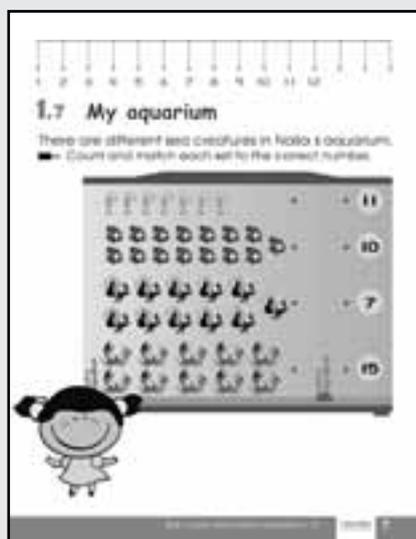
Activity 3

- Ask pupils if they have seen apple trees.
- Have they picked apples from apple trees? Ask pupils to share their experiences with the class.

Activity 4

- Give pupils a worksheet showing different sets of numbers.
- Ask pupils to arrange the numbers in each set in ascending order.

1.7 My aquarium



Suggested duration

40 minutes

Objectives

Count and match numbers to 15.

Required resources

- flashcards showing different sets of objects
- flashcards of numbers 1 to 15
- Additional:
matching worksheet

Key terms

sea creature
aquarium

Counting and match numbers to 15

Activity 1

- Shuffle 2 sets of cards, one showing sets of 1 to 15 objects and the other of numbers 1 to 15.
- Ask pupils to form groups of 4 or 5.
- Hold up a flashcard from each set and ask pupils to raise their hands and call 'match' if the number of objects matches the number on the flashcard.
- Give the cards to the first group to call correctly.
- The game ends when all the flashcards have been matched; the group with the most cards wins.

Activity 2

- Ask the pupils to describe the picture in Activity 1.7.
- Read the 'sentence, 'There are different sea creatures in Naila's aquarium.'
- Ask pupils to point to and identify the different sea creatures.
- Read the instruction, 'Count and match each set to the correct number.'
- Point to the first set of seahorses and count them together (7). Ask pupils to use a ruler and pencil to match the set of seahorses to the number 7.
- Ask pupils to match the rest of the sea creatures themselves.

Additional activities

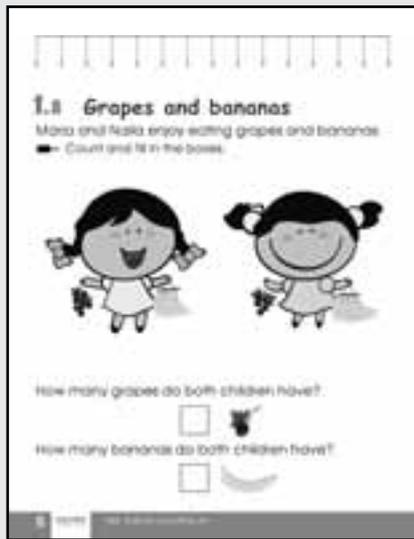
Activity 3

- Ask pupils if they been to an aquarium or if they have an aquarium at home.
- What kinds of animals do they usually see in an aquarium? Ask pupils to share their thoughts with the class.

Activity 4

- Give out the matching worksheets and ask pupils to match the sets to the correct numbers.

1.8 Grapes and bananas



Suggested duration

40 minutes

Objectives

Add by counting on.

Required resources

- bunches of grapes
- bunches of bananas
- Additional:
addition by counting on worksheet

Key terms

grape
banana

Add by counting on

Activity 1

- Place a small bunch of grapes on a table and count the grapes with the pupils.
- Introduce another bunch of grapes, and ask how many grapes you would have if you bought both bunches.
- Counting on from the first bunch, count how many grapes there are altogether in the 2 bunches.
- Do the same with bunches of bananas.

Activity 2

- Ask pupils to look at Activity 1.8.
- Read the sentence, 'Maria and Naila enjoy eating grapes and bananas.' Ask pupils to point to the grapes and bananas.
- Read the instruction, 'Count and fill in the boxes.'
- First, point to and count together the grapes Maria is holding. (8) Ask pupils to count on Naila's grapes to find the total number of grapes. (13) Elicit that there are 13 grapes altogether.
- Read the question, 'How many grapes do both children have?' Ask pupils to write '13' in the box beside the grapes.
- Ask pupils to count the number of bananas themselves by counting on.

Additional activities

Activity 3

- Give each pupil Worksheet 18 and ask them to count on to find the total number in each set.

Introduction

In this unit, pupils are introduced to the number 16. By the end of the unit, pupils should be able to recognise the number 16, and understand the quantity of 16 through counting various objects.



Pre-assessment activity

- Use number flashcards or ask pupils to use their fingers to revise the numbers 1 to 15.
Ask what number comes after 15.
- Use building blocks as in previous units to introduce 16.
- Ask 16 pupils to stand at the front of the classroom and count them together. Elicit that there are 16 pupils.



2.1 Mariam's birthday



Suggested duration

1 hour

Objectives

Recognize the number 16.
Write the number 16.

Required resources

- flashcards showing 1 to 16 objects
- flashcards of numbers 1 to 16
- Additional:
drawing paper
coloured sand
glue

Key terms

cake
cherry

Recognizing and writing the number 16

Activity 1

- Use the picture and number flashcards as in previous units to teach the number 16.
- Place the flashcard of number 16 on the board and write 16 above it. Ask pupils to repeat 'sixteen' after you.

- Write the number 16 again, large enough for pupils to see how it is written. Write it slowly and ask them to trace the number in the air with their index finger.

Activity 2

- Ask the pupils to describe the picture in Activity 2.1.
Read the statement, 'Neha likes the cake her mother bakes for her sister, Mariam.'
- Ask pupils to point to Neha. Read, 'Looks yummy!' and elicit/explain that it means 'good to eat'.
- Read the instruction, 'Colour the 16 cherries red.'
- Ask pupils to point to the cherries and hold up a red crayon before colouring 16 cherries red.
- Ask pupils to count the cherries. (16)
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 16 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils if they have birthday cakes on their birthdays.
- Have any of the pupils made a birthday cake for a family member? Ask them to talk about the cake and comment on their kindness to their relation.

Activity 4

- Set out coloured sand and glue around the classroom and give each pupil a sheet of drawing paper.
- Ask each pupil to draw a large number 16.
- Demonstrate how to decorate it by spreading glue over it, sprinkling it with coloured sand, and shaking off any excess sand.
- Art work can be shared or displayed in class.

2.2 Birthday candles



Suggested duration

40 minutes

Objectives

Recognize the number 16.

Write the number 16.

Required resources

- candles (optional)
- cake (optional)
- flashcard of number 16
- Additional:
worksheet to trace the number 16

Key terms

candle

Recognize and write the number 16

Activity 1

- Prepare a cake and candles, or draw a cake on the board or use felt candles on a felt board.
- Tell pupils that Mariam is 16 years old. Ask pupils to use their fingers to show 16.
- Elicit that there should be 16 candles on the cake and ask pupils to count as you place/draw 16 candles on the cake.
- When there are 16 candles on the cake, show the flashcard of number 16 and ask pupils to trace 16 in the air with their fingers.

Activity 2

- Ask the pupils to describe the picture in Activity 2.2.
- Read the statement 'Neha wants to put candles on Mariam's cake.'
- Read the instruction, 'Trace the candles to show the number 16.'
- Ask pupils to trace the number 16 with their index finger before tracing it with a pencil.
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 16 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils if they have helped to put candles on a birthday cake.
- Ask pupils to recall how many candles there were and whose birthday it was.

- Has pupils seen a candle in the shape of a number? If not, bring some to show the pupils.

Activity 4

- Give pupils a worksheet showing different objects with the number 16 on them, e.g. a bus stop, house number, athlete, etc. Ask pupils to trace and colour each number 16.

2.3 A card for Mariam



Suggested duration

40 minutes

Objectives

Count on to make 16.
Write the number 16.

Required resources

- lengths of string
- beads of different shapes and colours
- Additional:
cut-outs of different shapes
construction paper
glue

Key terms

birthday card
shape

Counting on to make 16; writing the number 16

Activity 1

- Show the students a length of string and thread one coloured bead onto it. Elicit that there is 1 bead.
- Repeat with beads of different shapes and colours until there are 16 beads on the string.
- Explain that although the beads are all different, we count on to find the total number of beads.
- Elicit that the total number of beads is 16 and ask pupils to trace the number in the air.

Activity 2

- Ask the pupils to describe the picture in Activity 2.3.
- Read the statement, 'Neha makes a birthday card for Mariam.'
- Ask pupils to point to the birthday card and elicit that there are 2 different shapes on the card.

- Read the instruction, 'Count the shapes on the card and fill in the blank.'
- Ask pupils to point to the yellow circle and count on together, regardless of shape or colour. (16)
- Elicit that there are 16 shapes and ask pupils to write 16 in the blank.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 16.

Additional activities

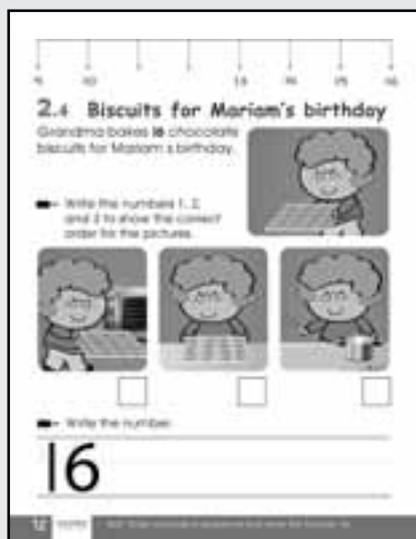
Activity 3

- Ask pupils to raise their hands if they have made a birthday card.
- Ask them to talk about the materials they used and who the card was for.

Activity 4

- Tell the students that they are going to make a card.
- Give each pupil a piece of construction paper, and set out shapes of different colours, and glue.
- Demonstrate how to fold the construction paper into 2 to make a card.
- Instruct pupils to use 16 cut-out shapes to decorate their cards.
- Allow pupils to share their card designs with the class and check that they have used 16 shapes.

2.4 Biscuits for Mariam's birthday



Suggested duration

40 minutes

Objectives

Order activities in sequence.
Write the number 16.

Required resources

- recipe
- Additional:
drawing paper
brown ink pad
new pencils

Key terms

chocolate biscuit
birthday

Order activities in sequence and write the number 16

Activity 1

- Show the pupils some recipes to introduce the basic steps of baking biscuits. For example,
 - 1) Preheat the oven
 - 2) Combine flour, eggs, and cheese in a large bowl
 - 3) Stir in milk
 - 4) Drop tablespoonfuls of batter onto prepared baking sheet.
 - 5) Bake in preheated oven until lightly brown.
 - 6) Wait for it to cool and serve.
- Show pupils a variety of recipes so that they are acquainted with the basic steps of baking.

Activity 2

- Ask the pupils to describe the pictures in Activity 2.4.
- Read the statement, 'Grandma bakes 16 chocolate biscuits for Mariam's birthday.'
- Ask pupils to point to each of the biscuits as you count them together (16).
- Read the instruction, 'Write the numbers 1, 2, and 3 to show the correct order for the pictures.'
- Point to the first picture and ask, 'Does grandma put the biscuits in the oven first?' (no)
- Point to the second picture, 'Does she take them out of the oven to cool first?' (no)
- Point to the third picture, 'Does grandma first mix the eggs and flour in a bowl?' Pupils should say 'yes', and write 1 in the box under that picture.
- Ask pupils to number steps 2 and 3 by themselves.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 16.

Additional activities

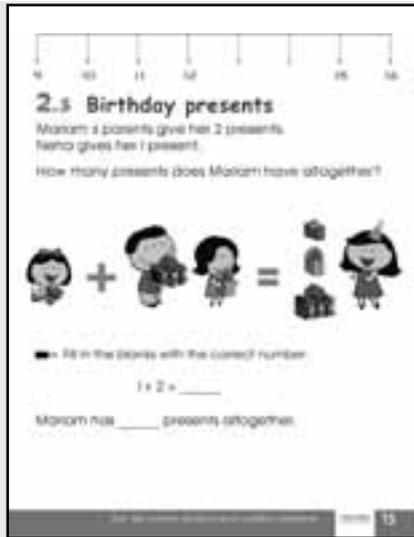
Activity 3

- Ask pupils to raise their hands if they know how to bake biscuits.
- Ask them to share their recipes with the class.

Activity 4

- Ask pupils to form groups of 4 and give each group a sheet of drawing paper, new pencils and brown ink pads.
- Ask each of them to draw 4 circles on the drawing paper. (16 per group) Explain that they are biscuits and each person has 4.
- Demonstrate how to stamp 'chocolate chips' on the biscuits using the brown ink and pencil erasers. Ask pupils to find the total number of biscuits on the paper. (16)

2.5 Birthday presents



Suggested duration

40 minutes

Objectives

Use number stories to solve addition problems.

Required resources

- felt objects
- felt board
- Additional:
worksheet

Use number stories to solve addition problems

Activity 1

- Use a felt board and objects to create addition stories. For example, to teach $1 + 2 = 3$ show a rabbit and a carrot; elicit that the rabbit has 1 carrot. Write 1 on the board.
- Place 2 more carrots on the board and show the rabbit hopping to them; elicit that the rabbit has '2 more' carrots. Write +2 on the board.
- Ask, 'How many carrots does the rabbit have altogether?' (3) Write = 3 on the board.
- Point to the parts of the sum as you ask: 'How many carrots did I give the rabbit?' (1)
- Ask, 'How many carrots did the rabbit find?' (2) Explain the meaning of the + sign.
- Ask, 'How many carrots does the rabbit have altogether?' (3) Explain the meaning of the = sign.
- Ask the pupils to count the carrots and read the sum $1 + 2 = 3$.

Activity 2

- Ask the pupils to describe the picture in Activity 2.5.
- Read the statement, 'Mariam's parents give her 2 presents.' Ask pupils to point to Mariam's parents and the 2 presents.
- Read the statement, 'Neha gives her 1 present.' Ask pupils to point to Neha and the 1 present.
- Read the question, 'How many presents does Mariam have altogether?'
- Count the presents together.(3)
- Read the instruction, 'Fill in the blanks with the correct number.'
- Point to and explain each part of the addition sum and relate them to the presents. (1 plus 2 equals 3) Write on the board ' $1 + 2 = 3$ '
- Ask pupils to write 3 in the blanks and read together 'Mariam has 3 presents altogether.'

Additional activities

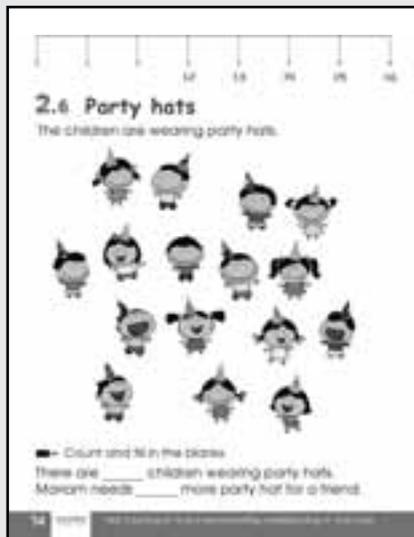
Activity 3

- Ask pupils if they receive presents on their birthday.
- Ask them to share with the class the best present they have received.

Activity 4

- Supply pupils with Worksheet 19 and ask them to write the numbers.

2.6 Party hats



Suggested duration

40 minutes

Objectives

- Counting to 16.
Demonstrate understanding of 'one more'.

Required resources

- lollipops
- Additional:
worksheet for pupils to count objects and draw 'one more'

Key terms

party hat

Counting to 16 and demonstrating understanding of 'one more'

Activity 1

- Place 4 lollipops on a table and ask 5 pupils to come to the front of the class.
- Ask each pupil to take a lollipop. One pupil will be left without a lollipop.
- Tell pupils, 'I need 1 more lollipop.'
- Repeat the activity with 9 lollipops and 10 pupils.
- Repeat the activity with different numbers of lollipops and pupils until pupils can say that you need '1 more' lollipop.

Activity 2

- Ask the pupils to describe the picture in Activity 2.6.
- Read the statement, 'The children are wearing party hats.' Ask pupils to point to the party hats.
- Read the instruction, 'Count and fill in the blanks.'

- Point to and count together the children wearing party hats. (15) Read together 'There are 15 children wearing party hats.'
- Ask pupils to find the total number of children. Pupils can count on from 15 to get 16.
- Point to the child without a party hat and tell the pupils, 'I need one more party hat.'
- Read with the pupils, 'Mariam needs 1 more party hat for a friend.'

Additional activities

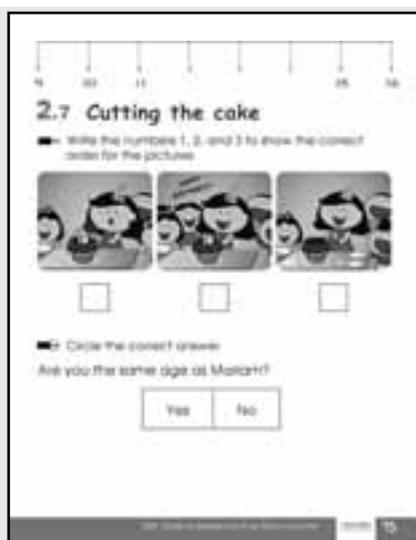
Activity 3

- Ask pupils to raise their hands if they have worn party hats at a party.
- Ask pupils to tell the class if there were enough party hats. Did everyone have a party hat? Were there more children or more party hats?

Activity 4

- Give out Worksheet 20 and ask pupils to write the number, and draw 'one more' in the box on the right.

2.7 Cutting the cake



Suggested duration

40 minutes

Objectives

Order a sequence of actions correctly.

Required resources

- flashcards of sequences of events or short video clips
- Additional:
drawing paper

Key terms

age

Order a sequence of actions correctly

Activity 1

- If possible, show a short video clip of a sequence of events, e.g. going up to stage to collect a prize, going to market to buy things, riding a bicycle from home to school, etc.
- Alternatively, show flashcards depicting a sequence of events.
- Hold up the first flashcard and say, 'Mother leaves the house to go to the market.'
- Hold up the second flashcard and say, 'Mother reaches the market'.
- Hold up the third flashcard and say, 'Mother buys some fish at the market.'

- Hold up the fourth flashcard showing mother carrying bags and say, 'Mother bought a lot of vegetables and fish from the market.'
- Repeat with other clips/flashcards so pupils will order a sequence of events correctly.

Activity 2

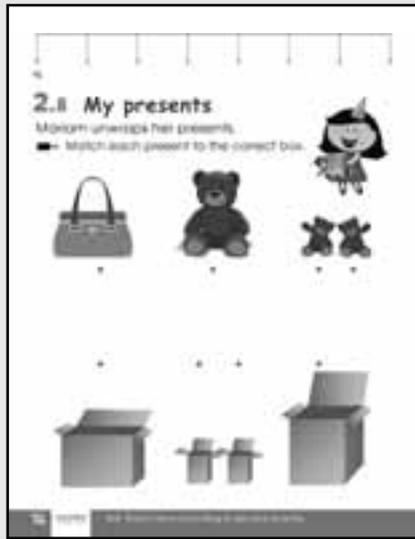
- Ask the pupils to describe the picture in Activity 2.7.
- Read the instruction, 'Write the numbers 1, 2, and 3 to show the correct order for the pictures.'
- Ask pupils which of the following sequences is correct:
 - 1) Blow out the candle. Friends sing 'Happy Birthday'. Remove the candle and cut the cake.
 - 2) Friends sing 'Happy Birthday'. Blow out the candle. Remove the candle and cut the cake.
 - 3) Remove the candle and cut the cake. Blow out the candle. Friends sing 'Happy Birthday'. Pupils should say that the second sequence is correct. Hence, guide pupils to label the pictures 1, 2, and 3 in this order.
- Read the question, 'Are you the same age of Mariam?' and the instruction, 'Circle the correct answer.'
- Ask pupils to raise their hands if they are 16 years old. Elicit that they should circle 'no'.

Additional activities

Activity 3

- Ask pupils to work in groups of 3, and give each group a sheet of drawing paper.
- Ask the first pupil to draw a picture, e.g. a boy receives a present from his mother.
- Ask the first pupil to pass the drawing to the second pupil to draw an action to continue the sequence of events, e.g. the boy unwraps the gift.
- The third pupil should continue the sequence, e.g. the boy is holding a toy car.
- Ask pupils to share their drawings with the class.

2.8 My presents



Suggested duration

40 minutes

Objectives

Match items according to size and quantity.

Required resources

- paper boxes of various sizes
- different objects
- Additional:
 - cardboard
 - scissors
 - glue

Key terms

present

Match items according to size and quantity

Activity 1

- Display boxes with objects inside them, e.g. shoes in a shoe-box.
- Remove the shoes from the box and elicit that the box must be the correct shape and size to fit the shoes.
- Repeat for e.g. a photo frame in a thin box, a large bag in a large box, matches in a match-box, etc.
- Try fitting items in the wrong boxes. Point out e.g. the bag is too big to fit in the photo frame box; the matchsticks will be in a mess in the shoe box because the box is too large.

Activity 2

- Ask pupils to look at Activity 2.8.
- Read the statement, 'Mariam unwraps her presents.'
- Read the instruction, 'Match each present to the correct box.'
- Point to the bag and ask which box would fit it. Elicit that it is too big for the 2 small boxes and should be placed in the first box because it is long.
- Ask pupils to use a ruler and pencil to match the bag to the first box.
- Ask pupils to match the big bear and the 2 small bears to boxes themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have ever received a gift in a box.
- Ask pupils to say if they have ever been given a large box containing a small gift. Ask them how they felt.

Activity 4

- Explain that they are going to make boxes.
- Give each pupil a piece of cardboard and ask them to decide what item they will make a box for, e.g. their water bottle, bag, book, etc.
- Help pupils to make and decorate an appropriately-sized box for the item of their choice.
- Ask them to put their item of choice in the box and show the class their artwork.

Introduction

In this unit, pupils are introduced to the number 17. By the end of the unit, pupils should be able to recognise the number 17, and understand the quantity of 17 through counting various objects.



Pre-assessment activity

- Revise the numbers 0 to 16 using flashcards, or ask pupils to show the numbers using their fingers.
- Ask what number comes after 16 and use building blocks to introduce 17 as in previous units.
- Ask 17 pupils to stand at the front of the class and count them together. Elicit that there are 17 pupils



3.1 Cycling and skating



Suggested duration

1 hour

Objectives

Recognize the number 17.
Write the number 17.

Required resources

- flashcards of 1 to 17 objects
- flashcards of numbers 1 to 17
- Additional:
drawing paper
glitter
glue

Key terms

child /children
park

Recognizing and writing the number 17

Activity 1

- Use picture and number flashcards of 1 to 17 in sequence, as in previous units, to introduce number 17.
- Write the number 17 on the board and ask pupils to trace the number 17 in the air.

Activity 2

- Ask pupils to describe the picture in activity 3.1.
- Read the statement, 'There are 17 children in the park.'
- Count the children together. (17)
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing number 17 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils if they like to go to the park.
- Ask pupils how often they go to the park.
- Ask pupils to tell classmates what they do at the park.

Activity 4

- Set out glitter and glue around the classroom and give each pupil a sheet of drawing paper.
- Ask each pupil to draw a large number 17 and show them how to decorate it using the glue and glitter. Remind them to shake off excess glitter.
- Ask pupils to show their artwork to the class.

3.2 Where is my bicycle?



Suggested duration

40 minutes

Objectives

Sequence numbers from 1 to 17.
Write the number 17.

Required resources

- flashcards of 1 to 17 objects
- flashcards of numbers 1 to 17
- Additional:
join the dots from 1 to 17 worksheet

Key terms

bicycle

Sequencing numbers from 1 to 17 and writing the number 17

Activity 1

- Use the flashcards in sequence to count up to 17 objects and identify the corresponding numbers.
- Display the number flashcards in sequence and recite with pupils 1 to 17.

Activity 2

- Ask pupils to describe the picture in Activity 3.2.
- Read the instruction, 'Join the numbers in order from 1 to 17 to help Amir find his bicycle.'
- Ask pupils to point to the bicycles and explain that they need to join the dots to find Amir's bicycle.
- Ask pupils to trace the dots from 1 to 17 with a finger before joining them with pencil.
- Are pupils able to identify Amir's bicycle?
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 17.

Additional activities

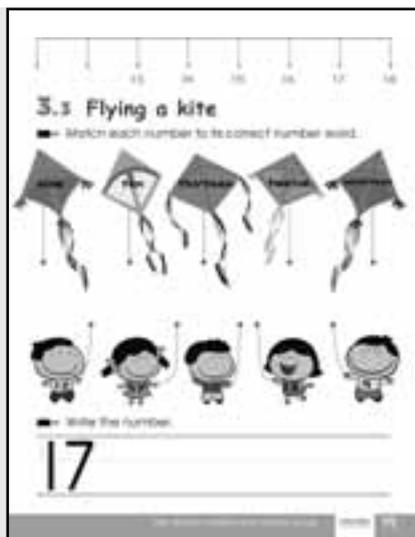
Activity 3

- Ask pupils to raise their hands if they have a bicycle.
- Ask pupils how many of them cycle to school.
- Ask pupils to describe their bicycles.

Activity 4

- Give pupils join the dots from 1 to 17 worksheets to find the correct path to an object.

3.3 Flying a kite



Suggested duration

40 minutes

Objectives

Match numbers and number words.

Required resources

- flashcards of numbers and number words
- Additional:
matching worksheet

Matching numbers and number words

Activity 1

- Scatter flashcards of numbers and number words randomly on a table.
- Ask groups of pupils to take turns to match the numbers and number words to form pairs.
- Use the number word cards to revise how to spell one to seventeen.
- Place the numbers and number words together on the board for revision.

Activity 2

- Ask pupils to look at Activity 3.1.
- Read the instruction, 'Match each number to its correct number word.'
- Point to the first kite and ask pupils to read the word. (9) Ask pupils to trace 9 in the air.
- Guide pupils to match kite (nine) to the child with 9 on his shirt using a pencil and a ruler.
- Repeat for the second kite (ten–10)
- Ask pupils to match the rest of the kites and children themselves.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 17.

Additional activities

Activity 3

- Give each pupil a worksheet to match numbers to number words.
- The worksheet should have 2 columns with numbers in one and number words in the other.
- Pupils should use a ruler and pencil to match the numbers and words.

3.4 Canoeing



Suggested duration

40 minutes

Objectives

Add to make 17 by counting on.
Write the number 17.

Required resources

- bags of sweets
- Additional:
worksheets to count on to 17

Key terms

canoe race

Adding to make 17 by counting on and writing the number 17

Activity 1

- Place 3 bags of sweets at the front of the class.
- Explain that you are going to find the total number of sweets in the 3 bags.
- Ask one pupil to come to the front and count the sweets as s/he removes them from the bag.
- Ask a second pupil to come to open the second bag and to continue counting the sweets from where the first pupil left off.
- Asking a third pupil to continue counting the sweets from the third bag.
- By counting on, pupils will find the total number of sweets in the 3 bags.

Activity 2

- Ask pupils to describe the picture in Activity 3.4.
- Read the statement, 'The children are watching a canoe race.'
- To check comprehension, ask pupils to point to the children watching and those in the canoes.
- Read the instruction, 'Count and fill in the blank.'
- First count together the people in the yellow canoe, (5) then continue counting those in the red canoe, (6 to 11) and finally those in the blue canoe (12 to 17).
- Elicit that there are 17 people in the canoes, and read together, 'Altogether, there are 17 people in the three canoes.'
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 17.

Additional activities

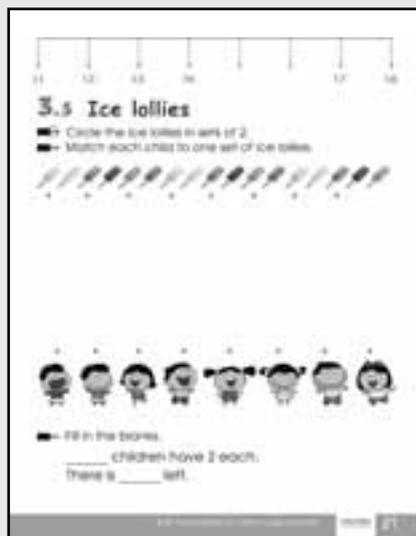
Activity 3

- Ask pupils to raise their hands if they have seen a canoe race.
- Ask them to talk about their experience. Was the race exciting?

Activity 4

- Give pupils Worksheet 21 requiring them to add by counting on up to 17. They should draw more to show the right number.

3.5 Ice lollies



Suggested duration

40 minutes

Objectives

Form sets of 2.
Match pairs of items.

Required resources

- lollipops
- Additional:
worksheet showing 8 children and 1 balloon

Key terms

ice lolly

Forming sets of 2; matching pairs of items

Activity 1

- Ask 5 pupils to stand at the front of the class.
- Set out 11 lollipops; 10 of them should be tied in 5 sets of 2.
- Ask each pupil to take a set of 2 lollipops.
- Ask them to count all the lollipops; the first pupil counts 1, 2; the second, 3, 4; the third, 5, 6, etc.
- Elicit that there is one lollipop remaining on the table and that if 5 pupils each take a set of 2, they will have 10 lollipops altogether.

Activity 2

- Ask pupils to look at Activity 3.5.
- Read the instruction, 'Circle the ice lollies in sets of 2.' Ask pupils to draw a circle around every two ice lollies with a finger, and then with a pencil.
- Read the instruction, 'Match each child to one set of ice lollies.'
- Ask pupils to use a pencil and ruler to draw a line to match one set of ice lollies to each child.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to count the children, (8) and read together, '8 children have 2 each.'
- Elicit that there is 1 ice lolly left and read together, 'There is 1 left.'

Additional activities

Activity 3

- Ask pupils if they like ice lollies.

Activity 4

- Give each pupil Worksheet 22 showing 8 children and 1 stray balloon.
- Demonstrate how to draw 2 balloons for the first child and ask pupils to do the same for each of the child. Ask them to count all the balloons. (17)

3.6 Picnic



Suggested duration

40 minutes

Objectives

Count and compare quantities using 'one more'.

Required resources

- apples
- Additional:
worksheet for pupils to count sets of objects and circle the set with 'one more'

Key terms

mat
cupcake
apple
drink

Counting and comparing quantities using 'one more'

Activity 1

- Place 7 apples at the front of the class and ask 8 pupils to come to the front of the class.
- Ask each of the pupils to take 1 apple. Pupils will realize that there are not enough apples and there will be 1 pupil left without an apple.
- Tell pupils, 'I need 1 more apple.'
- Ask another 5 pupils to come to the front of the class so there are 13 altogether.
- Place 12 apples in front of them.
- Ask each of the pupils to take 1 apple. Pupils will realize that there are not enough apples and there will be 1 pupil left without an apple.
- Tell pupils, 'I need 1 more apple.'
- Repeat the activity with different numbers of pupils and 1 apple fewer than the number of pupils, until pupils can tell you, 'I need 1 more apple.'

Activity 2

- Ask pupils to describe the picture in Activity 3.6.

- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to count the objects on the mat. First, point to and count the drinks together. (5)
- Then, point to the apples and count on. (6 to 11)
- Next, point to the cupcakes and continue counting. (12 to 17)
- Read together, 'There are 17 objects on the mat altogether.'
- Ask pupils to read the statement "Each child should have 1 apple, 1 cupcake, and 1 drink."
- Ask pupils to match an apple, a cupcake, and a drink to each of the children to see if each child can have 1 apple, 1 cupcake, and 1 drink.
- Read the instruction, 'Circle the correct answer.'
- Elicit that there are not enough drinks for all the children. Guide pupils to circle 'drink'.

Additional activities

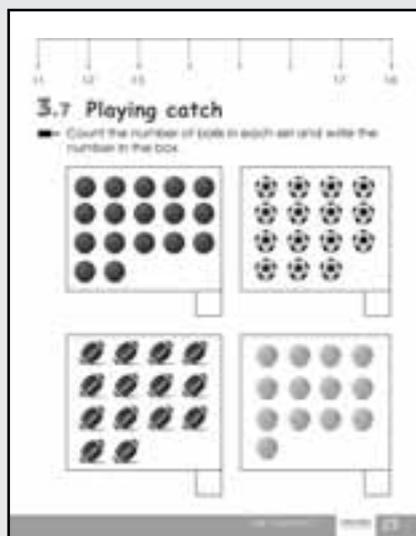
Activity 3

- Ask pupils to raise their hands if they have been on a picnic.
- Ask pupils to relate their picnic experience. What food was there? What did they do?

Activity 4

- Give out Worksheet 23 and explain that the pupils should count the items in each set and circle the set with 'one more'.

3.7 Playing catch



Suggested duration

40 minutes

Objectives

Count to 17.

Required resources

- flashcards of different sets of objects
- flashcard of number 17
- Additional:
worksheet to count and write the number

Key terms

ball

Count to 17

Activity 1

- Show a flashcard of a set of objects and ask pupils to identify and count the objects.

- Ask pupils to form groups of 4 or 5 and explain that they are going to play a game to identify the card that shows a set of 17 objects.
- If a pupil sees a card showing 17 objects, s/he should raise a hand and call out 'seventeen'. If that pupil is correct, the group scores a point; if wrong, the group loses a point.
- At the end of the game, the group with the most points wins.

Activity 2

- Ask pupils to look at Activity 3.7.
- Read the instruction, 'Count the number of balls in each set and write the number in the box.'
- Ask pupils to identify each of the balls in the picture.
- Point to the set of basketballs and count them together. (17) Ask pupils to write '17' in the box.
- Ask pupils to count and write the correct numbers for the other sets of balls.

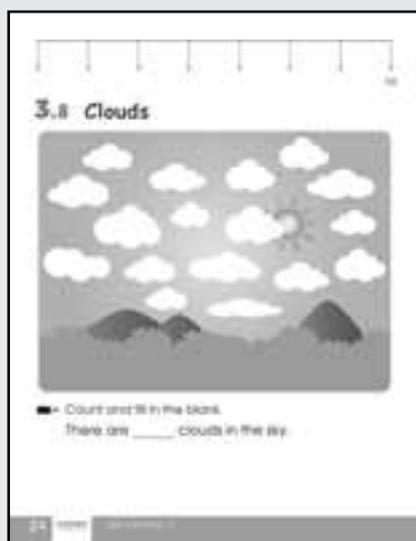
Activity 3

- Ask pupils to name their favourite ball game. Do they like basketball, tennis, etc.?
- Conduct a survey; which ball game do most pupils like?

Activity 4

- Give out a worksheet showing different sets of things.
- Ask the pupils to count the objects in each set and write the number.

3.8 Clouds



Suggested duration

40 minutes

Objectives

Count to 17.

Required resources

- felt board
- felt animals
- Additional:
drawing paper (enough for every pupil in the class)
sponge
water colour

Key terms

cloud
sky

Count to 17

Activity 1

- Display a felt board and give some pupils different sets of felt animals, e.g. 5 sheep, 6 sheep, and another set of 6 sheep.
- Ask the pupils to fix the sheep on the board as the other pupils count them.
- Repeat the activity using different numbers and different felt animals. The total number of felt animals on the board each time should be 17, but combinations of numbers should vary, e.g. 3, 6, and 8, etc.

Activity 2

- Ask pupils to look at Activity 3.8.
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to count the clouds and read together, 'There are 17 clouds in the sky.'

Additional activities

Activity 3

- Set out sponges and blue watercolour and give each pupil a sheet of drawing paper.
- Demonstrate how to dip the sponge lightly into the blue water colour and stamp it onto the paper to create clouds. Ask each pupil to do the same to create a picture with 17 clouds.
- Ask pupils to share their artwork with the class.

Introduction

In this unit, pupils are introduced to the number 18. By the end of the unit, pupils should be able to recognise the number 18, and understand the quantity of 18 through counting various objects.

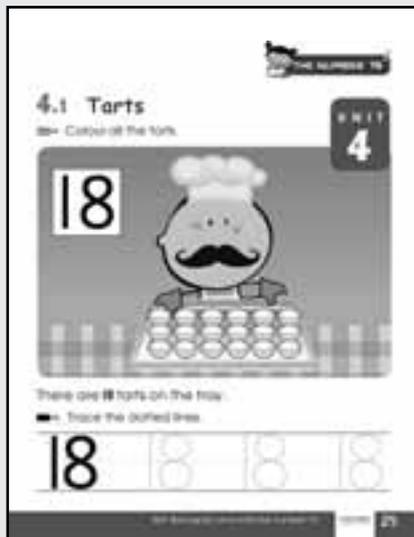


Pre-assessment activity

- Use flashcards to revise the numbers 0 to 17 or ask pupils to show the numbers using their fingers.
- Ask what number comes after 17.
- Use building blocks as in previous units to introduce the number 18.
- Ask 18 pupils to stand at the front of the class and count them together. Elicit that there are 18 pupils.



4.1 Tarts



Suggested duration

1 hour

Objectives

Recognize the number 18.
Write the number 18.

Required resources

- flashcards showing 1 to 18 objects
- flashcards of numbers 1 to 18
- Additional:
drawing paper
magazines
glue

Key terms

tart
tray

Recognizing and writing the number 18

Activity 1

- Use flashcards of sets of 1 to 18 objects and numbers 1 to 18 as in previous units to introduce number 18.
- Ask pupils to trace 18 in the air as in previous units.

Activity 2

- Ask pupils to describe the picture in Activity 4.1.
- Read the instruction, 'Colour all the tarts.'
- Ask pupils to point to one tart before they colour them all.
- Ask pupils to count the tarts on the tray with you. (18)
- Read the statement, 'There are 18 tarts on the tray.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing 18 by tracing the dotted lines.

Additional activities

Activity 3

- Ask pupils to raise their hands if they know how to bake tarts.
- Encourage pupils to share their recipes for tarts and ask them to bring home-baked tarts to class for the pupils to share.

Activity 4

- Ask pupils to work in groups of 4 or 5. Give each group drawing paper, glue, and magazines.
- Ask each group to draw a large number 18 on the drawing paper.
- Ask them to cut/tear 18 number '18's from the magazines and glue them around the number 18.
- Ask pupils to show their artwork to the class.

4.2 Muffins

4.2 Muffins

11 12 13 14 15 16 17 18

18

1st 2nd

Count and fill in the blanks.

There are _____ muffins in the 1st box.

There are _____ muffins in the 2nd box.

_____ more muffins are needed to fill up the 2nd box.

Trace the dotted lines.

18 18 18 18

Suggested duration

40 minutes

Objectives

Recognize the number 18.

Write the number 18.

Count on to 18.

Required resources

- box
- cakes
- flashcard of number 18
- Additional:
worksheet to count on to 18

Key terms

muffin

Recognizing and writing the number 18; counting on to 18

Activity 1

- Place on a table a box that can hold 18 cakes and some cakes.
- Show pupils how you can pack 18 cakes into the box and ask them to count the cakes as you do so.
- When there are 18 cakes in the box, show pupils that the box is full.
- Elicit that there are 18 cakes in the box and show a flashcard of number 18
Ask pupils to trace the number 18 in the air with their fingers.

Activity 2

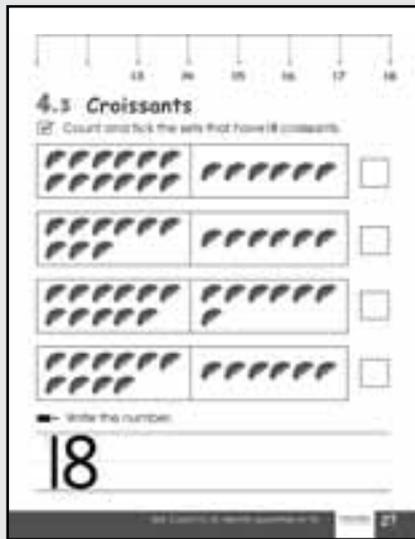
- Ask pupils to describe the picture in Activity 4.2.
- Read the instruction 'Count and fill in the blanks.'
- Point to and count together the muffins in the 1st box. (18).
- Ask pupils to write '18' in the first blank and read together, 'There are 18 muffins in the 1st box.'
- Repeat for the second box. (15 muffins)
- Ask pupils to count on to find out how many more muffins are needed to fill up the second box. Ask them to put up their thumb as you count 16, their index finger as you count 17 and another finger as you count 18.
- Elicit that they have put up 3 fingers and guide them to write '3' in the third blank.
- Read together, '3 more muffins are needed to fill up the 2nd box.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing 18.

Additional activities

Activity 3

- Give pupils Worksheet 24 requiring them to count on to 18.
- They should colour more shapes to make the correct number.

4.3 Croissants



Suggested duration

40 minutes

Objectives

Count to 18.

Identify quantities of 18.

Required resources

- flashcards – different numbers of objects
- flashcard of number 18
- Additional:
drawing paper

Key terms

croissant

Counting to 18; identifying quantities of 18

Activity 1

- Prepare 2 flashcards, each showing a set of the same objects. The total number of objects shown on the two cards should total 18, e.g. 7 stars on the first and 11 on the second.
- Show the first flashcard and ask pupils to identify and count the objects.
- Show the second flashcard and ask pupils to count on to find the total number of objects. (18)
- Hold up the flashcard of number 18 and ask pupils to practise writing the number in the air.
- Repeat with other pairs of flashcards.

Activity 2

- Ask pupils to look at Activity 4.3.
- Read the instruction, 'Count and tick the sets that have 18 croissants.'
- Count together the croissants on the left, (12) and then count on to add those on the right. (18)
- Elicit that there are 18 croissants and ask pupils to put a tick in the box beside the set.
- Repeat for the second question. Elicit that there are 15 croissants and that the box should be left empty.
- Ask pupils to count the rest of the sets themselves.
- Read the instruction, 'Write the number.' Ask pupils to practise writing 18.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have eaten croissants.
- Ask pupils to keep their hands up if they really like croissants, and count how many do.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw 2 trays.
- Ask them to draw 18 of their favourite cakes / pastries on these trays. There should be some on each tray and the total should be 18.
- Ask pupils to share their drawings with the class, explaining the number of cakes / pastries on each tray.

4.4 Doughnuts and pretzels

4.4 Doughnuts and pretzels

Count and write the numbers in the boxes.

Write the number.

18

Suggested duration

40 minutes

Objectives

- Count up to 18.
- Write the number 18.

Required resources

- flashcards of different sets of objects
- flashcards of number 18
- Additional:
worksheet to count and write the number

Counting up to 18 and writing the number

Activity 1

- Show a flashcard of a set of objects and ask pupils to identify and count the objects.
- Ask pupils to form groups of 4 or 5 to play a game to identify the cards that show 18 objects.
- A pupil who sees a card showing 18 objects should raise a hand and call out 'eighteen'. If correct, that group scores a point; if incorrect, the group loses a point.
- At the end of the game, the group with most points wins.

Activity 2

- Ask pupils to describe the picture in Activity 4.4.
- Read the instruction, 'Count and write the numbers in the boxes.'
- Elicit that the first group shows doughnuts and count them together. (15)

- Ask pupils to write the number 15 in the box.
- Ask pupils to count the second set of doughnuts themselves and write the number. (18)
- Elicit that the third set shows pretzels, and count them together. (16)
- Ask pupils to count the pretzels in the fourth question themselves and write the number. (13)
- Read the instruction, 'Write the number.' Ask pupils to practise writing 18.

Additional activities

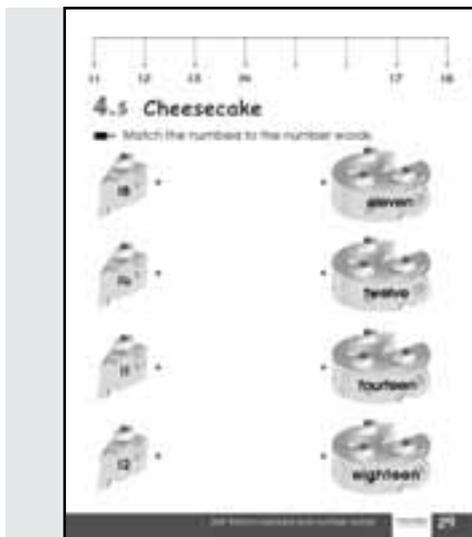
Activity 3

- Conduct a survey to see if pupils prefer doughnuts or pretzels. Explain that they can only raise their hands once.
- Ask pupils to raise their hands if they like doughnuts; repeat for pretzels. Count each set of students to see which is the most popular.

Activity 4

- Give pupils a worksheet showing sets of up to 18 items.
- Ask them to count the objects in each set and write the numbers.

4.5 Cheesecake



Suggested duration

40 minutes

Objectives

Match numbers and number words

Required resources

- flashcards of number and number words
- Additional:
matching worksheet

Matching numbers and number words

Activity 1

- Fix flashcards showing numbers and number words on the board in random order.
- Ask groups of pupils to take turns to come up and match words and numbers to make pairs.
- Hold up each number word card to revise spelling.
- Leave the pairs of cards on the board for pupils to revise.

Activity 2

- Ask pupils to look at Activity 4.5.
- Read the instruction, 'Match the numbers to the number words.'
- Point to the first slice of cheesecake and elicit that the number is 18. Ask pupils to spell eighteen.
- Ask pupils to use a ruler and pencil to match the slice of cheesecake '18' to the cheesecake with the word 'eighteen' in the second column.
- Repeat for the second slice. (14 and fourteen)
- Ask pupils to complete the exercise themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they like cheesecake.
- Ask them to tell the class if they buy the cheesecakes or if their mother bakes them.

Activity 4

- Give each pupil a worksheet showing numbers in the left column and number words in the right.
- Ask pupils to match the numbers to the corresponding number words using a pencil and a ruler.

4.6 Cupcakes



Suggested duration

40 minutes

Objectives

Add by counting on to 18.

Required resources

- strings with different numbers of beads
- Additional:
addition by counting on worksheet

Key terms

cupcake

Add on by counting on to 18

Activity 1

- Ask 2 pupils to come to the front of the class and give each a string with a different number of beads.

- Ask the first pupil to count the beads on his/her string and ask the second pupil to continue counting the number of beads on his/her string.
- Ask pupils, 'How many beads are there altogether?'
- Repeat the activity with different numbers of beads and different pairs of pupils.

Activity 2

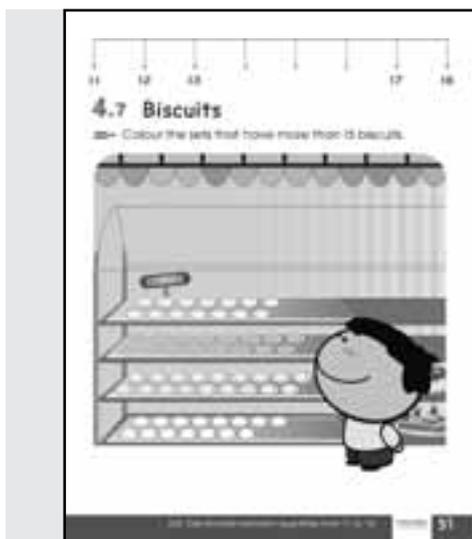
- Ask pupils to describe the picture in Activity 4.6.
- Read the first statement, 'There are 8 cupcakes on the plate.' Count the cakes together to check.
- Read the second statement, 'Mother bakes 10 more.' Count together the cupcakes on the tray to check there are 10.
- Help pupils to count the number of cupcakes by counting on altogether. (18)
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to write '18' in the blank and read together, 'There are 18 cupcakes now.'

Additional activities

Activity 3

- Give pupils Worksheet 25 and ask them to count on to find the total numbers.

4.7 Biscuits



Suggested duration

40 minutes

Objectives

Discriminate between quantities from 11 to 18.

Required resources

- flashcards of different sets of things
- Additional:
colour the correct sets worksheets

Key terms

biscuit

Discriminate between quantities from 11 to 18

Activity 1

- Show a flashcard of a set of items and ask pupils to identify and count the items.
- Ask pupils to form groups of 4 or 5 to play a game. In the first round they should raise a hand if a flashcard shows more than 5 objects. If correct, the group scores a point; if incorrect the group loses a point.

- In the second round pupils must identify the cards that show more than 10 objects.
 - In the third round they must identify sets of more than 15 items.
- At the end of the game, the group with most points wins.

Activity 2

- Ask pupils to look at Activity 4.7.
- Read the instruction, 'Colour the sets that have more than 15 biscuits.'
- Count together the first set of biscuits. (14)
- Elicit that there are fewer than 15 biscuits and so the set should not be coloured.
- Count the second set together (16) and elicit that there are more than 15, so the set should be coloured.
- Ask pupils to complete the exercise themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they like biscuits.
- Ask them to share with the class the type of biscuit they like best.

Activity 4

- Give pupils a worksheet showing different-sized sets of items.
- Ask them to count the objects in each set and colour the sets that have more than 10 objects.

4.8 Cream puffs

4.8 Cream puffs

Each box can hold 18 cream puffs.

How many more must be added to have 18 in each box?

Count and then write the numbers to be added in each answer box.

Suggested duration

40 minutes

Objectives

Add to make quantities of 18.

Required resources

- box to hold 10 pencils
- pencils
- Additional:
worksheet to draw more to make 18

Key terms

cream puff

Add to make quantities of 18

Activity 1

- Place 5 boxes that can each hold 10 pencils in front of class,
- Each box should be numbered from 0 to 9 and contain that number of pencils.
- Place some pencils on the table.
- Ask pupils to form groups of 5. In turn, each group should come to the front of the class to complete the activity.
- Explain that each box should contain 10 pencils and pupils should add pencils to each box so that they all contain 10. Guide them to count the pencils in a box and then count on to 10 as they put more pencils into the box.
- Ensure that each box contains the original number of pencils before asking a new group to complete the activity.

Activity 2

- Ask pupils to look at Activity 4.8.
- Read the statement, 'Each box can hold 18 cream puffs.', and the question, 'How many more must be added to have 18 in each box?'
- Read the instruction "Count and then write the numbers to be added in each answer box".
- Go through the first question with the pupils. Count the cream puffs together. (14)
- Ask pupils to use their fingers to count on (15, 16, 17, 18) and elicit that 4 more should be added.
- Ask pupils to write '4' in the box for the first set.
- Guide pupils through the remaining questions.

Additional activities

Activity 3

- Give pupils Worksheet 26 showing sets of fewer than 18 items and ask them to count on and draw more to make 18. Draw more presents in the first question and more butterflies in the second question.

Introduction

In this unit, pupils practise counting. By the end of the unit, pupils should be able to add by counting forwards, count up to 18, count backwards from 18 in sequence, and use their fingers to count.



Pre-assessment activity

- Use flashcards to revise the numbers 1 to 18 or ask pupils to show the numbers using their fingers.
- Show flashcards of different sets of objects and ask pupils to count the objects.
- Show 2 flashcards of different sets of objects and ask pupils to find the total number by counting on.
- Alternatively, provide sets of real objects for pupils to count in the same way.



5.1 Board games



Suggested duration

1 hour

Objectives

Count forwards.

Required resources

- numbers 1 to 18 on large sheets of paper
- Additional:
board games

Key terms

board game
car counter

Count forwards

Activity 1

- Write the numbers 1 to 18 on large sheets of paper.
- Use these to lay a trail of numbers in sequence from your classroom to a nearby location, e.g. the garden.
- Draw a start line at classroom door and ask pupils to queue up behind it. Tell pupils they should count forwards to 18 to reach a secret location.
- Pupils take turns to count forwards as they follow the trail to the garden.

Activity 2

- Ask pupils to describe the picture in Activity 5.1.
- Read the statement, 'Shayaan and Farhan are playing a board game.' Ask pupils to point to Shayaan and Farhan, and ask questions to check contextual understanding.
- Read the instruction, 'Count forwards to 4 and colour the car counter.'
- Ask pupils to place a finger on the start box and count forwards to 4, moving their fingers forward one box at a time – 1, 2, 3, 4.
- Ask them to colour the car counter.

Additional activities

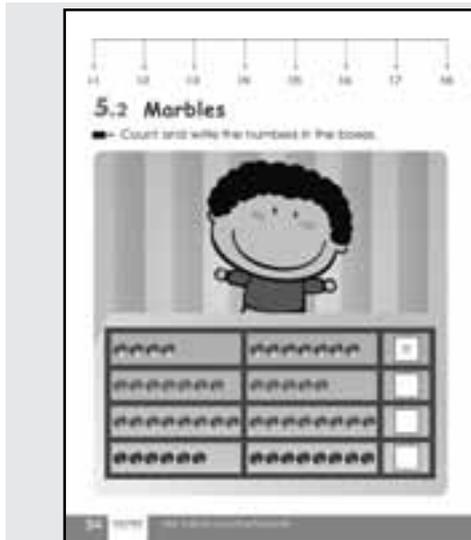
Activity 3

- Ask pupils to raise their hands if they like to play board games.
- Ask pupils to share with the class what kinds of board games they play.

Activity 4

- Ask pupils to work in groups of 4 or 5 and give each group a simple board game, e.g. Snakes and Ladders, Ludo, etc., or design a game of your own for them to play.

5.2 Marbles



Suggested duration

40 minutes

Objectives

Add by counting forwards.

Required resources

- boxes
- bag of marbles
- Additional:
addition by counting on worksheet

Add by counting forwards

Activity 1

- Place 2 boxes and a bag of marbles on a table at the front of the classroom.
- Ask for 2 pupil volunteers.
- Ask the first to take some marbles from the bag and place them in the first box.

- Ask the second pupil to do the same and place them in the second box.
- Ask the pupils to find the total number of marbles by counting those in the first box and then counting on those in the second box..
- Ask different pairs of students to repeat the activity.

Activity 2

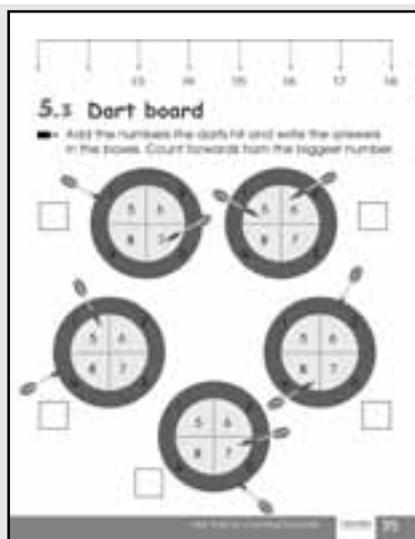
- Ask pupils to look at Activity 5.2.
- Read the instruction, 'Count and write the numbers in the boxes.'
- Point to and count together the blue marbles in the left column. (4)
- Count on the blue marbles in the right column. (5 -11)
- Point out that the first question is an example, and the answer 11 has been written in the box.
- Ask the pupils to complete the exercise themselves in the same way.

Additional activities

Activity 3

Give pupils Worksheet 27 showing pairs of sets of items and ask pupils to count on to find and write the total numbers of items.

5.3 Dart board



Suggested duration

1 hour

Objectives

Add by counting forwards.

Required resources

- flashcards of different sets of objects
- Additional:
 - dart board (child safe)
 - darts (child safe)

Key terms

darts

Add by counting forwards

Activity 1

- Show 2 flashcards of different sets of objects.
- Ask pupils to identify and count the items on the first card, e.g. 9 and the second, e.g. 2.
- Show the cards again and ask them to count on to find the total number. (11)

- Repeat the activity with the same cards shown in the reverse order, i.e. 2 and then 9, and ask pupils to count on from 2.
- Elicit that counting on from the larger number is easier and faster.

Activity 2

- Ask pupils to describe the picture in Activity 5.3.
- Read the instruction, 'Add the numbers the darts hit and write the answers in the boxes. Count forwards from the biggest number.'
- Ask pupils to look at the first dart board and see that the darts hit numbers 1 and 7.
- Elicit that 7 is the bigger number and ask them to count forwards from 7 to 8.
- Ask them to write '8' in the box beside the first dart board.
- Repeat for the second dart board, counting on from 6 to the total of 11.
- Ask pupils to write '11' in the box beside the second dart board.
- Allow pupils to complete the other 3 questions themselves.

Additional activities

Activity 3

- Set up a child-safe (e.g. magnetic) dart board for the pupils to play.
- Alternatively, make dartboards by covering cardboard with felt and use different coloured felt circles to create zones on the board numbered 1 to 8. Use ping-pong balls with Velcro on them as darts.
- Give pupils 2 balls each to throw at the board to land on a number – the 'score'.
- Ask them to add the two scores to find their final score.
- Pupils take turns to play and the pupil with the highest total score from 2 throws wins.

5.4 Toy cars



Suggested duration

40 minutes

Objectives

Count up to 18.

Required resources

- toy cars
- Additional:
drawing paper

Key terms

toy car

Counting up to 18

Activity 1

- Hide 18 toy cars around the classroom and ask pupils to look for them without saying how many there are.
- Ask pupils to place all the toy cars they have found on the table in front of the class.
- Ask 'How many toy cars did you find?' and count them together to find the total. (18)
- Ask pupils to repeat after you, 'There are 18 toy cars.'

Activity 2

- Ask pupils to describe the picture in Activity 5.4.
- Read the instruction, 'Count and fill in the box.', and the question, 'How many toy cars does Shayaan have altogether?'
- Ask pupils to point to the cars as you count them together. (18)
- Ask pupils to write the number 18 in the box, and repeat after you '18 cars'.

Additional activities

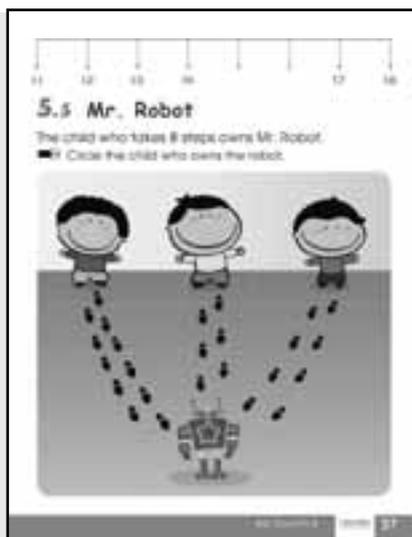
Activity 3

- Ask pupils to raise their hands if they have toy cars.
- Ask pupils to tell the class how many toy cars they have.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw 18 of their favourite toys.
- Ask pupils to share their pictures with the class and talk about their favourite toys.

5.5 Mr. Robot



Suggested duration

40 minutes

Objectives

Count to 8

Required Resources

- a toy robot
- Additional:
worksheet to circle the correct tree

Key terms

robota

Count to 8

Activity 1

- Set up a fake crime scene in class. Draw with chalk a human silhouette on the floor and draw/arrange sets of chalk or paper footprints going from the crime scene towards the door.
- Tell the pupils that the suspect took 8 steps from the crime scene to the door and ask them to identify the set of footprints belonging to the suspect.
- If necessary, explain that the other sets of footprints do not belong to the suspect.

Activity 2

- Ask pupils to look at Activity 5.5.
- Read the statement, 'The child who takes 8 steps owns Mr. Robot.'
- Ask pupils to count the sets of foot prints in turn to identify the child who owns Mr. Robot.
- Read the instruction, 'Circle the child who owns the robot.', and ask pupils to point to child they should circle. Pupils should point to the third child and circle the child in pencil.

Additional activities

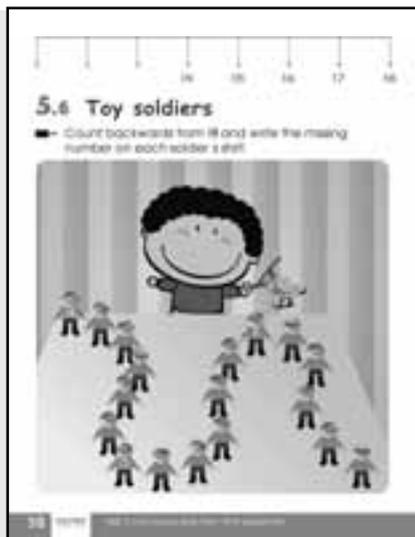
Activity 3

- Ask pupils to raise their hands if they own robots.
- Ask pupils how many robots they own.

Activity 4

- Give each pupil a worksheet showing 3 trees, one with 15 apples, one with 10 and the third with 8.
- Tell pupils that Maria always picks apples from the tree with 8 apples and ask them to count the apples to identify and then circle the correct tree.

5.6 Toy soldiers



Suggested duration

40 minutes

Objectives

Count backwards from 18 in sequence.

Required resources

- flashcards of numbers 1 to 18
- Additional:
worksheet to count backwards from 18 in sequence

Key terms

soldier

Count backwards from 18 in sequence

Activity 1

- Revise the sequence of numbers from 1 to 18 by asking 'What number comes after 1, 2, 3, etc.'
- Show flashcards of numbers 1 to 18 in random order and ask pupils to arrange them in order. And then recite the sequence of numbers from 1 to 18.
- Point to number 18 and ask pupils to look at the flashcards and recite the number sequence backwards.
- Remove all the flashcards from the board except 18 and replace the others in turn as you ask 'What number comes before 18, 17, 16, etc.'
- Ask pupils to recite the sequence of numbers backwards again by looking at the flashcards on the board.

Activity 2

- Ask pupils to describe the picture in Activity 5.6.
- Read the instruction, 'Count backwards from 18 and write the missing number on each soldier's shirt.'
- Ask pupils to point to the toy soldiers which already have numbers on their shirts. (18, 12 and 6)
- Elicit that numbers should be written on the shirts of all the other soldiers.
- Ask 'What comes before 18?' Pupils should say '17'. Ask them to write '17' on the shirt of the soldier in front of soldier number 18.
- Continue in this way until the sequence is complete.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have toy soldiers.
- Tell pupils to tell the class how many toy soldiers they have.
- Ask pupils if they usually line up their soldiers.

Activity 4

- Give pupils Worksheet 28 and ask them to fill in the missing numbers.

5.7 The Lost teddy



Suggested duration

40 minutes

Objectives

Count backwards in sequence.

Required resources

- flashcards of numbers 1 to 18
- Additional:
join the dots worksheet

Key terms

teddy bear

Count backwards in sequence

Activity 1

- Place flashcards numbered 1 to 18 on the table and ask a group of pupils to place them on the board in reverse order from 18 to 1. The other pupils should check that the order is correct.
- Ask pupils to recite the sequence from 18 to 1.
- Repeat the activity as many times as necessary to teach the backwards number sequence.

Activity 2

- Ask pupils to look at Activity 5.7.
- Read the instruction, 'Join the dots by counting backwards from 18 to 11 to help Sara find her teddy bear.'
- Explain that they need to join the dots to find out which of the 3 teddy bears is Sara's.

- Ask them to trace the dots with a finger before joining them with pencil. They should see that Sara's is the teddy bear sitting on the left.

Additional activities

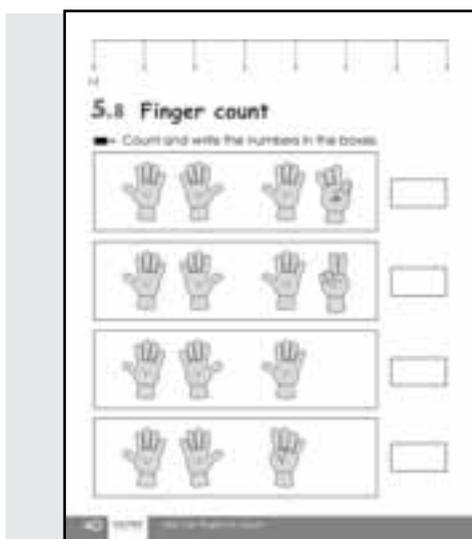
Activity 3

- Ask pupils to raise their hands if they have teddy bears.
- Ask pupils to share with the class how big their teddy bears are and how many teddy bears they have.

Activity 4

- Give pupils a worksheet and ask them to join the dots from 18 to 1 to find the correct path to an object.

5.8 Finger count



Suggested duration

40 minutes

Objectives

Use fingers to count.

Required resources

- drawing paper
- water colour

Using fingers to count

Activity 1

- Revise using fingers to count from 1 to 10. As each number is called in sequence, ask pupils to show that number of fingers.
- Ask them to open both palms to show '10' and explain that they have to add on to 10 for numbers greater than 10.
- Ask pupils to clench their fists again and show '1' finger to count on to 11.
- Then, ask them to show '2' to count on to 12, etc.

Activity 2

- Ask pupils to look at Activity 5.8.
- Read the instruction, 'Count and write the numbers in the boxes.'

- Work through the first example with the pupils, asking them to count the first set of fingers, (10) and then count on the second set. (18)
- Ask them to write '18' in the box on the right.
- Repeat for the second question (17).
- Guide pupils through the remaining questions.

Additional activities

Activity 3

- Place water colour around the classroom and give each pupil a sheet of drawing paper.
- Ask them to create a handprint which depicts the number 18.
- They should first print both hands to show 10, and then one more hand print to show 5 more.
- Ask them to count on how many more prints they need to show 18.
- Ask pupils to share their artwork with the class.

Introduction

In this unit, pupils look back at the concepts they have learnt 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

- Use flashcards to recall with pupils all they have learned in the previous 5 units: the numbers and number words 15 to 18; the number sequence from 1 to 18 and from 18 to 1; and adding by counting on.



6.1 Let us go to school



Suggested duration

40 minutes

Objectives

Count and compare quantities.
Identify sets of 16.

Required resources

- flashcards of different sets of items
- Additional:
worksheet to colour the sets that have fewer or more.

Counting and comparing quantities; identifying sets of 16

Activity 1

- Show flashcards of 2 different sets of items e.g. 16 and 12 notebooks.
- Ask pupils to count the notebooks on each card and say which shows fewer.
- Repeat the activity with different flashcards.

Activity 2

- Ask pupils to look at Activity 6.1.
- Read the instruction, 'Tick the sets that have fewer than 16 items.'
- Point to the first set and count together as the students point to the bags. (12)
- Elicit that there are fewer than 16 and ask pupils to tick that set of bags.

- Count the second set of items in the same way; stop at '16' and point out that there are 4 more rulers to count. Elicit that there are more, not fewer, than 16 rulers and therefore they should not tick that set.
- Ask pupils to complete the remaining tasks themselves..

Additional activities

Activity 3

- Give pupils a worksheet showing sets of different quantities of identical objects.
- For some sets, ask pupils to colour the set that has fewer; for others ask them to colour the set that has more.

6.2 Cats



Suggested duration

40 minutes

Objectives

Add by counting on to 16.

Required resources

- picture of a playground
- Additional:
worksheet to count on to 16

Key terms

cat

Add by counting on to 16

Activity 1

- Show the picture of a playground on the overhead projector.
- Ask questions about the picture. For example, 'How many children/slides/benches are there?'

Activity 2

- Ask pupils to look at Activity 6.2.
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to point to the cats as you count them together. (14)
- Ask how many more cats are needed to make 16, and help pupils to use their fingers to count on, 15, 16.

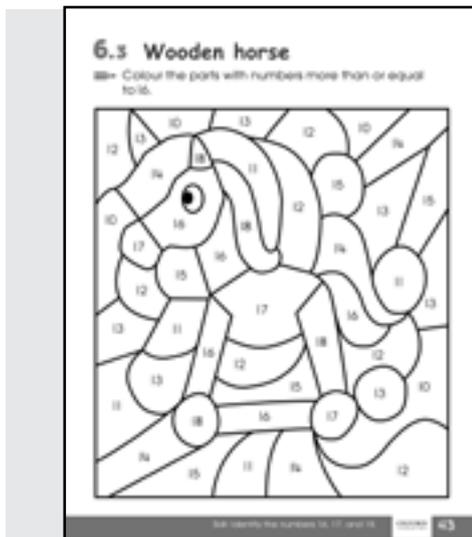
- Ask pupils to write the correct number in the blank. Read together, '2 more cats are needed to make 16.'

Additional activities

Activity 3

- Give pupils a worksheet that requires them to draw more items of a given set to make 16.

6.3 Wooden horse



Suggested duration

40 minutes

Objectives

Identify the numbers 16, 17, and 18.

Required resources

- flashcards of numbers 1 to 16
- flashcards showing pictures of objects
- Additional:
drawing paper

Identify the numbers 16, 17, and 18

Activity 1

- Show a flashcard of one object and the corresponding number flashcard.
- Repeat this for numbers in sequence to 16; each time elicit that each subsequent card shows one more than the previous card.
- When you show cards for 17 and 18, point out that 17 and 18 are more than 16.

Activity 2

- Ask pupils to describe the picture in Activity 6.13.
- Read the instruction, 'Colour the parts with numbers more than or equal to 16.'
- Ask pupils to tell you what numbers are more than or equal to 16. (16, 17 18)
- Ask them to point to the numbers 16, 17, and 18 in the picture and colour them.
- Ask pupils what they see in the picture.

Additional activities

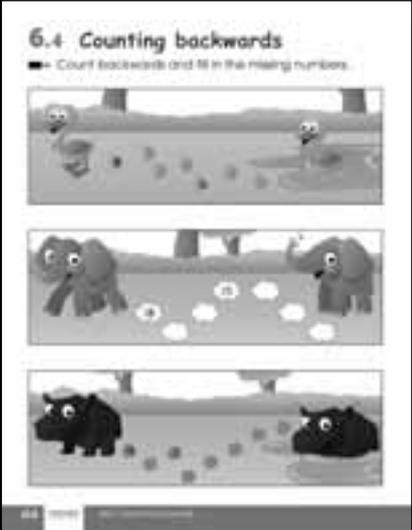
Activity 3

- Ask pupils to raise their hands if they have ridden on a wooden horse.
- Ask pupils to share with the class where they rode the wooden horse. Was it fun?

Activity 4

- Give pupils a sheet of drawing paper. Ask them to draw a study and include in their drawing, 16 pencils, 17 shelves, and 18 books.
- Ask them to share their drawings with the class.

6.4 Counting backwards



6.4 Counting backwards
Count backwards and fill in the missing numbers.

Suggested duration
40 minutes

Objectives
Count backwards.

Required resources

- flashcards of numbers 1 to 18
- Additional:
fill in the missing number in the sequence worksheet

Count backwards

- Scatter flashcards of numbers 1 to 18 on the table.
- Ask a few pupils to come and arrange them on the board in backwards sequence starting from 18.
- The other pupils should check that the order is correct.
- Ask pupils to recite the sequence from 18 to 1.

Activity 2

- Read the instruction, 'Count backwards and fill in the missing numbers.'
- Ask pupils to look at the first picture and tell you what number comes before 8. (7)
- Ask them to write '7' on the foot print before 8.
- Ask what number comes before 7. Guide pupils to write 6 on the footprint before 7.
- Repeat for the rest of the number sequence.

- Similarly, guide pupils through the 2 other questions and complete the number sequence correctly.

Additional activities

Activity 3

- Give pupils a worksheet showing incomplete backwards number sequences and ask pupils to fill in the missing numbers.

New Syllabus

PRE-PRIMARY MATHEMATICS TEACHING GUIDE

B4



OXFORD
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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 learned concepts with accuracy and confidence.

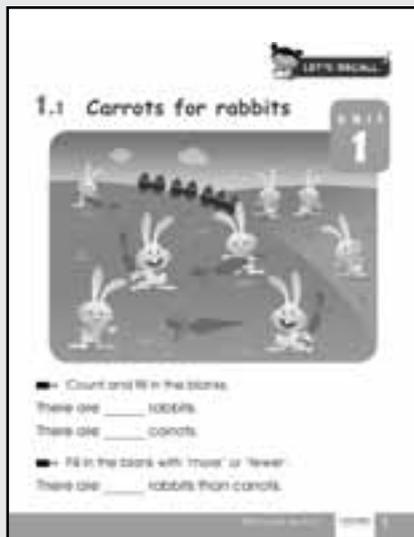


Pre-assessment activity

- Use flashcards of objects and numbers to revise numbers 1 to 18.
- Read / recite together the sequence of numbers from 1 to 18 and backwards from 18 to 1.



1.1 Carrots for rabbits



Suggested duration

40 minutes

Objectives

- Count up to 8.

Required resources

- flashcards showing 1 to 8 objects
- flashcards of numbers 1 to 8
- Additional:
drawing paper (enough for all the pupils in the class)

Key terms

rabbit
carrot

Count up to 8

Activity 1

- Show flashcards of 1 to 8 objects. Ask students to identify the objects and say how many there are.

Activity 2

- Ask pupils to describe the picture in Activity 1.1.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to count the rabbits, (8) and write 8 in the first blank.
- Read together, 'There are 8 rabbits.'

- Ask pupils to count the carrots, (5) and write 5 in the second blank.
- Read together, 'There are 5 carrots.'
- Read the instruction, 'Fill in the blank with 'more' or 'fewer'.'
- Ask pupils to compare the number of rabbits and carrots, and guide them to write the appropriate word.
- Read together, 'There are more rabbits than carrots.'

Additional activities

Activity 3

- Ask pupils to raise their hands if they have rabbits at home.
- Ask pupils to tell the class what their rabbits eat.

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw 8 mice.
- Then ask them to draw pieces of cheese; there should be fewer pieces of cheese than mice.

1.2 Grandma's Cats



Suggested duration

40 minutes

Objectives

Count up to 12.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to circle the set with a given number of objects

Key terms

cat
house

Count up to 12

Activity 1

- Show flashcards of different sets of objects. Ask pupils to identify the object and say how many there are.

Activity 2

- Ask pupils to describe the picture in Activity 1.2.

- Read the statement, 'Grandma keeps many cats in her house.'
- Ask pupils to point to Grandma and the cats to check contextual understanding.
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to point to the cats as you count them together. (12)
- Read together, 'There are 12 cats in the house.'

Additional activities

Activity 3

- Ask pupils to raise their hands if they have cats at home.
- How many cats do they have?
- Ask pupils to share their experiences of cats with the class.

Activity 4

- Give out worksheets showing sets of objects.
- Ask pupils to count and circle the sets that contain given numbers of objects.

1.3 Which one is my puppy?



Suggested duration

40 minutes

Objectives

Count in sequence from 1 to 15.

Required Resources

- flashcards showing 1 to 15 objects
- flashcards of numbers 1 to 15
- Additional:
drawing paper
footprint cut-outs numbered 1 to 15
glue

Key terms

puppy

Count in sequence from 1 to 15

Activity 1

- Show in sequence flashcards of 1 to 15 objects and ask pupils to identify and count the objects.
- Show the corresponding number card for each set.

- Show the number cards in sequence again and recite together the sequence of numbers 1 to 15.

Activity 2

- Ask pupils to look at Activity 1.3.
- Read the instruction, 'Join the numbers in order from 1 to 15 to help Sidra find her puppy.'
- Explain that there are 3 puppies and they must join the dots to find Sidra's puppy.
- Ask pupils to follow the numbers from 1 to 15 with a finger before joining them with pencil.
- Elicit that Sidra's puppy is the one in the middle.
- Read the instruction, 'Colour Sidra's puppy.' Ask pupils to colour Sidra's puppy.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have puppies.
- How many puppies do they have?
- Ask pupils to share their experiences of puppies with the class.

Activity 4

- Ask pupils to work in groups of 4 or 5, and give each group a sheet of drawing paper and glue.
- Scatter sets of footprint cut-outs numbered 1 to 15 on the floor and ask the pupils to place them in order from 1 to 15.
- Ask pupils to glue the cut outs in order from 1 to 15 on the drawing paper.
- Ask pupils to decorate their drawings by drawing grass, leaves, etc.

1.4 Fish



Suggested duration

40 minutes

Objectives

Count to 16.

Add by counting on.

Required resources

- basket
- apples
- pears
- plastic bag
- Additional:
addition by counting on worksheet.

Key terms

clownfish

angelfish

tank

Count to 16; add by counting on

Activity 1

- Place a basket containing two types of fruit on a table, e.g. 3 apples and 3 pears.
- Take more pieces of fruit out of a plastic bag and show the pupils e.g. 4 apples and 6 pears.
- Ask pupils to find the total number of pieces of fruit by counting on. Begin with the fruit in the basket (6) and count on the fruit from the bag.(7 to16)
- Place all the fruit in the basket and elicit that there are 16 pieces of fruit altogether.
- Repeat the activity, varying the combinations of apples and pears, to practise counting on to 16.

Activity 2

- Ask pupils to describe the picture in Activity 1.4.
- Read the sentence, 'Sidra has 5 clownfish and 5 angelfish in a tank.'
- Ask pupils to point to the fish tank and count the clownfish and angelfish to check that there are 5 of each.
- Read the second sentence, 'She buys 2 more clownfish and 4 more angelfish.'
- Ask pupils to point to the 2 clownfish and 4 angelfish in the bag that Sidra is holding.
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to find the total number of fish.

- First count together the fish in the tank. (10) Then count on the fish in the bags. (11 to 16)
- Ask pupils to write 16 in the blank and read together, 'Sidra has 16 fish altogether'.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have fish at home.
- How many fish do they have?

Activity 4

- Give out Worksheet 29 and ask pupils to draw more objects in each set to make the correct numbers.

1.5 Seashells



Suggested duration

40 minutes

Objectives

Count up to 16.

Required resources

- Flashcards of different sets of objects
- Additional:
worksheet to colour the correct number of things

Key Terms

seashell
basket

Count up to 16

Activity 1

- Show flashcards of different sets of objects and ask pupils to identify and count the objects.

Activity 2

- Ask pupils to look at the picture in Activity 1.5.
- Read the statement, 'Maria has many seashells in her baskets.'
- Ask pupils to point to the seashells and the baskets to check understanding.
- Read the instruction, 'Count and colour 16 of them.'
- Ask pupils to point to the seashells as you count together to 16.

- Ask pupils to colour the 16 seashells. Elicit that there are 2 extra seashells that do not need to be coloured.

Additional activities

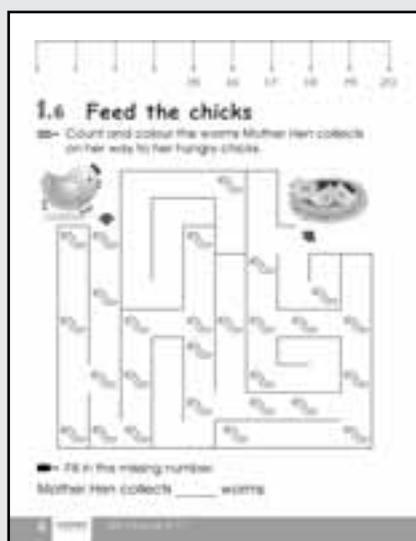
Activity 3

- Allow pupils to talk about their seashell collections.
- How many seashells do they have in their collection?
- Do they have seashells the same shape as those in the book?

Activity 4

- Give pupils a worksheet showing 2 sets of diagrams, one of 18 objects and the other of 20.
- Ask pupils to colour 16 objects in each set.

1.6 Feed the chicks



Suggested duration

40 minutes

Objectives

Count up to 17.

Required resources

- flashcards of sets of 1 to 17 objects
- flashcards of numbers 1 to 17
- Additional:
worksheet to count up to 17.

Key terms

worm
chick

Count up to 17

Activity 1

- Show flashcards of 1 to 17 objects in sequence and ask pupils to identify and count the objects.
- Show the corresponding number card for each set.
Show each of the number cards in sequence again and recite together 1 to 17.

Activity 2

- Ask pupils to describe the picture in Activity 1.6.
- Read the instruction, 'Count and colour the worms Mother Hen collects on her way to her hungry chicks.'

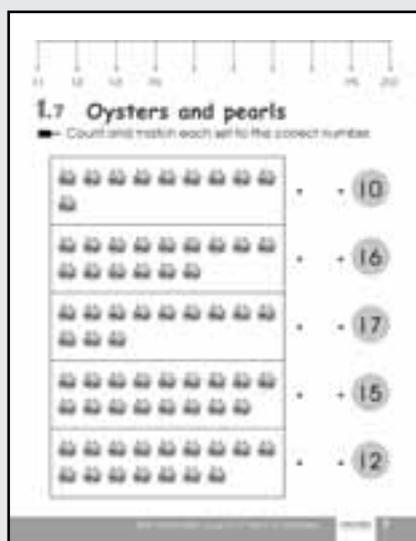
- Ask pupils to point to the mother hen and the chicks to check understanding.
- Guide pupils to trace the path between Mother Hen and her chicks and then ask them to colour the worms.
- Read the instruction, 'Fill in the missing number.'
- Ask pupils to count the worms they have coloured and write the number in the blank.
- Read together, 'Mother Hen collects 17 worms.'

Additional activities

Activity 3

- Give pupils Worksheet 30 requiring them to count to 17 and trace a path. It should show a maze with a number of objects along the way. For example, tell pupils that Sidra picks up books along the way from the library to home. Ask students to count and colour the books.

1.7 Oysters and pearls



Suggested duration

40 minutes

Objectives

Match sets of up to 17 items to numbers.

Required Resources

- flashcards of different sets of objects
- flashcards of numbers 1 to 17
- Additional:
matching worksheet

Match sets of up to 17 items to numbers

Activity 1

- Shuffle the cards showing the sets of objects and those showing the numbers.
- Ask pupils to form groups of 4 or 5 to play a matching game.
- Explain that you will hold up a flashcard from each set of cards; if they match, students should hold up a hand and call 'match'. If the pupil is correct, give the 2 flashcards to that group.
- The game ends when all the flashcards have been matched; the group with most cards wins.

Activity 2

- Ask pupils to describe the picture in Activity 1.7.
- Read the instruction, 'Count and match each set to the correct number.'
- Count together the oysters in the first set. (10) Ask pupils to match this set to the number 10 using a pencil and a ruler.
- Ask pupils to match the rest of the oyster sets and numbers themselves.

Additional activities

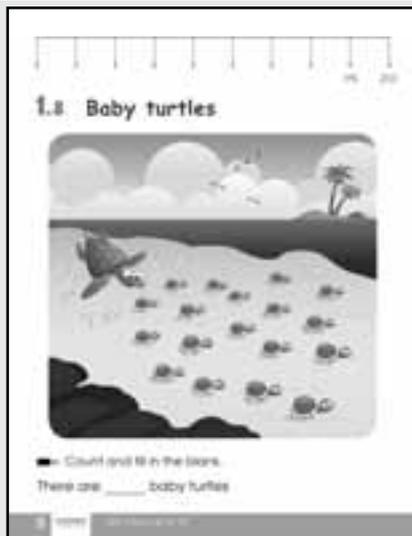
Activity 3

- Ask pupils if they seen oysters and pearls.
- Explain how pearls are formed and obtained from oysters.
- Encourage pupils to go to the internet to look at videos on how pearls are harvested from oysters.

Activity 4

- Give pupils a worksheet showing sets of objects and corresponding numbers. Ask them to match the sets to the correct numbers.

1.8 Baby turtles



Suggested duration

40 minutes

Objectives

Count up to 18.

Required resources

- flashcards of different sets of objects
- flashcard of number 18
- Additional:
worksheet to count and write the number

Key terms

baby turtle

Count up to 18

Activity 1

- Show a flashcard and ask pupils to identify and count the objects.
- Ask pupils to form groups of 4 or 5 to play a game to identify the card that shows 18 objects.

- Hold up one card at a time. Once a pupil sees a set of 18 objects, s/he should raise a hand and call 'eighteen'. If correct, that group scores a point; if incorrect, that group loses a point.
- The group with the most points at the end of the game wins.

Activity 2

- Ask pupils to look at Activity 1.8.
- Read the instruction, 'Count and fill in the blank.'
- Ask pupils to point to the baby turtles as you count them together. (18)
- Ask pupils to write 18 in the blank. Read together, 'There are 18 baby turtles.'

Additional activities

Activity 3

- Ask pupils if they have seen baby turtles in documentaries or in real life
- Ask pupils to relate their observations to the class.

Activity 4

- Give pupils a worksheet that shows different sets of things. Ask them to count the objects in each set and write the number.

Introduction

In this unit, pupils are introduced to the number 19. By the end of the unit, pupils should be able to recognise the number 19, and understand the quantity of 19 through counting various objects.



Pre-assessment activity

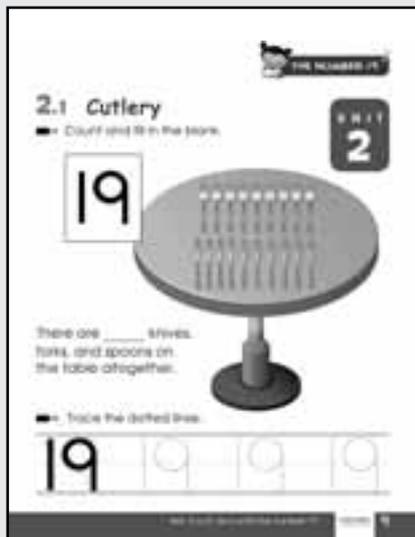
- Use flashcards to revise numbers 0 to 18, or ask pupils to show the numbers using their fingers.
- Ask what number comes after 18.

Use building blocks to introduce the number 19 as in previous units.

- Ask 19 pupils to stand at the front of the classroom and count them together. Elicit that there are 19 pupils.



2.1 Cutlery



Suggested duration

1 hour

Objectives

Count the number 19.

Write the number 19.

Required resources

- flashcards showing 1 to 19 objects
- flashcards of numbers 1 to 19
- Additional:
worksheet to trace objects and write the number 19

Key terms

knife
fork
spoon
table

Counting and writing the number 19

Activity 1

- Use flashcards to introduce the number 19 as in previous units.
- Write 19 on the board and ask pupils to trace it in the air as in previous units.

Activity 2

- Ask pupils to describe the picture in Activity 2.1.
- Read the instruction, 'Count and fill in the blank'.
- Ask pupils to point to the knives, forks and spoons to identify them.
- Ask pupils to point to the items of cutlery as you count them together. (19)
- Ask them to write 19 in the blank and read together 'There are 19 knives, forks, and spoons on the table altogether.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing 19 by tracing the dotted lines.

Additional activities

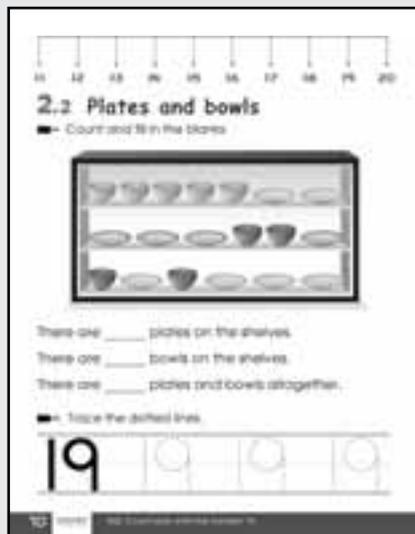
Activity 3

- Ask pupils to raise their hands if they have cutlery at home. All pupils should raise their hands.
- Ask them to talk about how each item is used.
- Do pupils use the fork or the knife more?

Activity 4

- Give pupils Worksheet 31 and ask them to trace the Suns and the number 19.

2.2 Plates and bowls



Suggested duration

40 minutes

Objectives

Count.

Write the number 19.

Required resources

- disposable cutlery
- flashcard of number 19
- Additional:
 - drawing paper
 - 19 spoons
 - glue

Key terms

plate
bowl
shelf

Counting and writing the number 19

Activity 1

- Place some disposable cutlery on the table and ask pupils to identify the different items.
- Ask 3 pupils to come to the front of the class and ask each of them to select and count one of the items: spoons, forks and knives.
- Ask pupils to find the total number of cutlery items.
- When pupils say 19, hold up the flashcard of number 19 and ask them to trace 19 in the air.

Activity 2

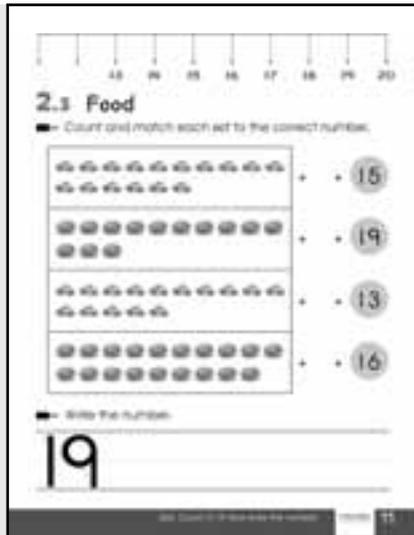
- Ask pupils to describe the picture in Activity 2.2.
- Read the instruction, 'Count and fill in the blanks.'
- Ask pupils to point to a plate and a bowl to check understanding.
- Count together the plates on the shelves. (10)
- Ask pupils to write 10 in the first blank. Read together, 'There are 10 plates on the shelves.'
- Repeat for the bowls (9).
- Ask them to write 9 in the second blank. Read together, 'There are 9 bowls on the shelves.'
- Ask pupils to count on to find the total number of plates and bowls.
- Guide pupils to write 19 in the third blank.
- Read together, 'There are 19 plates and bowls altogether.'
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing the number 19.

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and 19 disposable spoons.
- Ask pupils to glue the backs of the spoons and stick them onto the drawing paper.
- Show them how to draw petals around each spoon face, and leaves around each handle/'stem' to make 19 flowers.
- Ask pupils to share their flower artwork with the class.
- What kinds of flowers did they draw?
- You may also ask pupils to draw faces on the spoons so that they have 'smiling flowers'.

2.3 Food



Suggested duration

40 minutes

Objectives

Count to 19.

Write the number.

Required Resources

- flashcards of different sets of objects
- flashcards of numbers 1 to 19

Additional:

matching worksheet

Counting to 19 and writing the number

Activity 1

- Use flashcards as in previous units to introduce the number 19.

Activity 2

- Ask pupils to look at Activity 2.3.
- Read the instruction, 'Count and match each set to the correct number.'
- Ask pupils to point to the first set of sandwiches as you count them together. (16) Then ask them to match the first set of sandwiches to number 16 using a pencil and a ruler.
- Ask pupils to complete the activity themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they like to eat burgers. Count the hands.
- Ask pupils to raise their hands if they like to eat sandwiches. Count the hands.
- Tell pupils the results of the survey.

Activity 4

- Give pupils a worksheet and ask them to match the sets to the correct numbers.

2.4 Mushroom soup



Suggested duration

40 minutes

Objectives

Count.

Write the number 19.

Required resources

- bowl
- balls / marbles
- Additional:
worksheet to count on to 19.

Key terms

mushroom

Counting and writing the number 19

Activity 1

- Place some balls / marbles and a bowl that can hold 19 balls / marbles on a table.
- Demonstrate that the bowl can hold 19 balls / marbles by asking the pupils to count as you put them into the bowl one by one.
- When pupils say 19, hold up the flashcard of number 19. Ask them to trace 19 in the air.

Activity 2

- Ask pupils to describe the picture in Activity 2.3.
- Read the question, 'How many more mushrooms are needed to make 19 mushrooms?'
- Count together the mushrooms in the 1st bowl. (6)
- Count on the mushrooms in the 2nd bowl. (13)
- Read the instruction, 'Draw the correct number of mushrooms in the empty bowl.'
- Ask pupils to count on to find out how many more mushrooms are needed. They should put out fingers as they count on from 14 to 19. Elicit that they have put out 6 fingers.
- Guide pupils to draw 6 mushrooms in the empty bowl.
- Read the instruction, 'Write the number.' Ask pupils to practise writing the number 19.

Additional activities

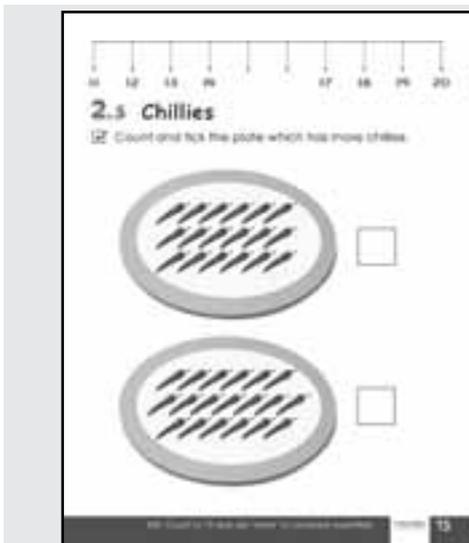
Activity 3

- Ask pupils to raise their hands if they like mushroom soup.
- Ask pupils to explain why they do/do not like mushroom soup.

Activity 4

- Give pupils a worksheet showing sets of objects and ask them to draw more objects to make 19.

2.5 Chillies



Suggested duration

40 minutes

Objectives

- Count to 19.
- Use 'more' to compare quantities.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet to circle more or less

Key terms

chilli

Counting to 19 and using 'more' to compare quantities

Activity 1

- Show pupils flashcards of different sets of objects and ask them to identify and count the objects, e.g. 15 tomatoes; 19 lady's fingers.
- Elicit that there are more lady's fingers than tomatoes.
- Show the flashcard of the 19 lady's fingers, say 'more', and ask pupils to repeat the word.
- Repeat with other pairs of flashcards.

Activity 2

- Ask pupils to look at Activity 2.5.
- Read the instruction, 'Count and tick the plate which has more chillies.'
- Count together the chillies on the first plate. (18)
- Repeat for the chillies on the second plate. (19)
- Ask pupils to point to the plate that has more chillies. Guide them to tick the box by the second plate.

Additional activities

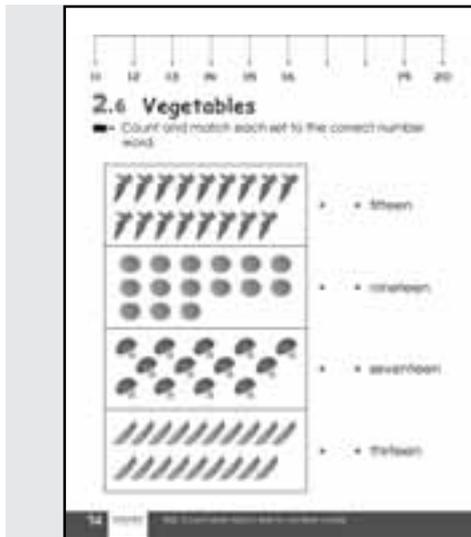
Activity 3

- Ask pupils to raise their hands if they like to eat chillies.
- Ask those who did not raise their hands why they do not like chillies. Are they too spicy?

Activity 4

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

2.6 Vegetables



Suggested duration

40 minutes

Objectives

Count and match sets to number words.

Required resources

- flashcards of different sets of vegetables
- flashcards of number words
- Additional:
matching worksheet

Counting and matching sets to number words

Activity 1

- Display 5 flashcards showing different sets of vegetables on the board.
- Give 5 pupils the corresponding number word cards and ask them to match them to the correct sets.
- Repeat the activity with different flashcards and different pupils.

This could be played as a game with a point for the first to match the cards each time.

Activity 2

- Ask pupils to look at Activity 2.6.
- Read the instruction, 'Count and match each set to the correct number word.'
- Count the carrots in the first set together. (17)
- Elicit that there are 17 carrots and ask pupils to spell the word s-e-v-e-n-t-e-e-n.
- Guide pupils to join the set of carrots to the word seventeen using their pencils and rulers.
- Repeat for the 15 potatoes.
- Ask pupils to complete the activity themselves.

Additional activities

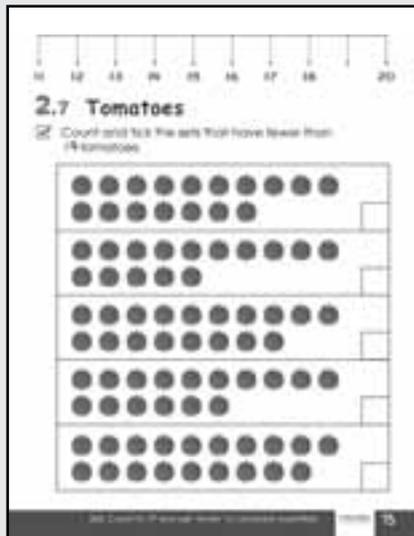
Activity 3

- Ask pupils to raise their hands if they like to eat vegetables.
- Ask pupils to name their favourite vegetables.
- Ask pupils who did not raise their hands to say why they dislike vegetables.

Activity 4

- Give pupils the matching worksheet and ask them to match the sets to the correct number words.

2.7 Tomatoes



Suggested duration

40 minutes

Objectives

Count to 19.

Use 'fewer' to compare quantities

Required resources

- tomatoes
- Additional:
worksheet to draw fewer objects

Key terms

tomato

Counting to 19; using 'fewer' to compare quantities

Activity 1

- Place 19 tomatoes in front of the class and ask 21 pupils to come to the front.
- Ask one pupil to give out the tomatoes to the 21 pupils.
- Elicit that there are fewer tomatoes than pupils.
- Ask pupils to repeat 'fewer' three times.

Activity 2

- Ask pupils to look at Activity 2.7.
- Read the instruction, 'Count and tick the sets that have fewer than 19 tomatoes.'

- Point to and count together the first set of tomatoes. (17)
- Elicit that there are fewer than 19 tomatoes and ask pupils to put a tick in the box beside that set.
- Repeat for the second set of tomatoes. (15)
- Ask pupils to complete the activity themselves.

Additional activities

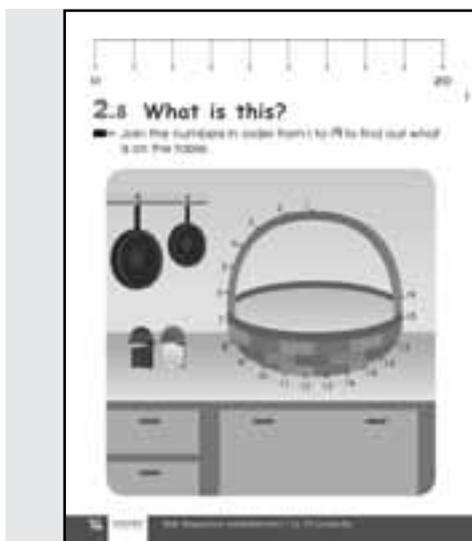
Activity 3

- Ask pupils to raise their hands if they like tomatoes.
- Ask pupils to share with the class how they usually eat tomatoes. With salad? With their burgers or sandwiches?

Activity 4

- Give pupils Worksheet 32. Ask them to count the objects and then draw a set that contains fewer items in the box on the right. They should at least draw 10 objects in the box on the left.

2.8 What is this?



Suggested duration

40 minutes

Objectives

Sequence numbers from 1 to 19 correctly.

Required resources

- flashcards of 1 to 19 objects
- flashcards of numbers 1 to 19
- Additional:
worksheet to draw 19 steps in order

Sequence numbers from 1 to 19 correctly

Activity 1

- Show the picture and number flashcards in sequence, as in previous units, to revise the sequence of numbers from 1 to 19.

Activity 2

- Ask pupils to look at Activity 2.8.

- Read the instruction, 'Join the numbers in order from 1 to 19 to find out what is on the table.'
- Ask the pupils to trace the numbers from 1 to 19 with a finger before joining them with pencil.
- Elicit that they have traced a basket.

Additional activities

Activity 3

- Give pupils Worksheet 33.
- Explain that Farhan needs to climb up 19 steps to his tree house. Ask pupils to draw a ladder with 19 steps and number them 1 to 19.

Introduction

In this unit, pupils are introduced to the number 20. By the end of the unit, pupils should be able to recognise the number 20 and understand the quantity of 20 through counting various objects.



Pre-assessment activity

- Revise numbers 1 to 19 as in previous units.
- Ask what number comes after 19.
- Use building blocks as in previous units to introduce 20.
- Ask 20 pupils to stand at the front of the classroom and count them together.



3.1 Car park



Suggested duration

1 hour

Objectives

Recognize the number 20.
Write the number 20.

Required resources

- flashcards showing 1 to 20 objects
- flashcards of numbers 1 to 20
- Additional:
drawing paper

Key terms

car park

Recognizing and writing the number 20

Activity 1

- Use flashcards as in previous units to introduce the number 20.

Activity 2

- Ask pupils to describe the picture in Activity 3.1.
- Read the statement, 'There are 20 cars in the car park.'
- Ask pupils to point to each car and count them to see that there are 20 cars.
- Read the instruction, 'Colour the 4 cars', and ask pupils to colour them.
- Read the instruction, 'Number each car from 1 to 20', and guide pupils to do this.

- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing 20 by tracing the dotted lines.

Additional activities

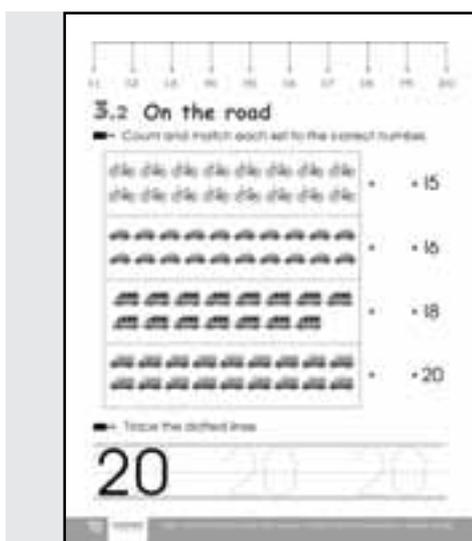
Activity 3

- Ask pupils to raise their hands if they have been to a car park.
- Ask pupils to describe the car park. Is it normally full?

Activity 4

- Give each pupil a sheet of drawing paper and ask them to draw a race track and 20 cars numbered 1 to 20.

3.2 On the road



Suggested duration

40 minutes

Objectives

Count to 20.

Write the number.

Match sets to the correct number words.

Required resources

- flashcards of different sets of objects
- flashcards of numbers 1 to 20
- Additional:
matching worksheet

Counting to 20 and writing the number; matching sets to the correct number words

Activity 1

Show flashcards of different sets of objects and ask pupils to identify and count them.

- Ask pupils to form groups of 4 or 5 to play a game.
- Place number cards on the board; show a flashcard of a set of objects. Pupils should count the items and the first pupil to take the correct number card scores a point for their group.
- Continue until all the cards have been matched. The group with most points wins.

Activity 2

- Ask pupils to look at Activity 3.2.
- Read the instruction, 'Count and match each set to the correct number.'

- Count the bicycles together. (16) Elicit that there are 16 bicycles.
- Guide pupils to join the set of bicycles to the number 16 using a pencil and ruler.
- Repeat for the cars. (20)
- Ask pupils to match the other 2 sets of vehicles themselves.
- Read the instruction, 'Trace the dotted lines.' Ask pupils to practise writing 20 by tracing the dotted lines.

Additional activities

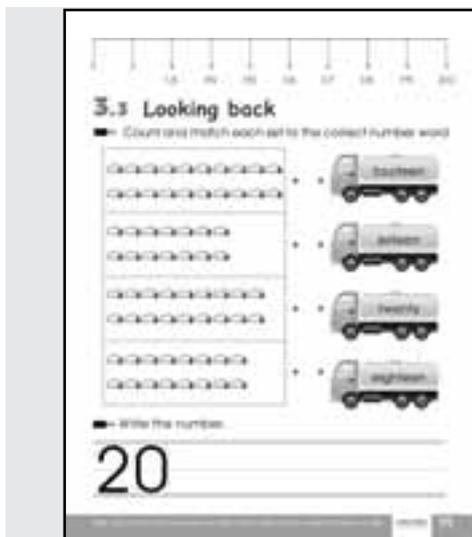
Activity 3

- Ask pupils what modes of transport their family owns. It could be a bicycle, a car, etc.
- Ask pupils to share with the class the mode of transport they use most often.

Activity 4

- Give out the worksheets and ask pupils to match the sets of objects to the correct numbers.

3.3 Looking back



Suggested duration

40 minutes

Objectives

- Count to 20.
- Write the number.
Match sets to the correct number words.

Required resources

- flashcards of different sets of objects
- flashcards of number words
- Additional:
worksheet to draw the correct number

Counting to 20 and writing the number; matching sets to the correct number words

Activity 1

- Ask pupils to form groups of 4 or 5 to play a matching game.
- Scatter flashcards of different sets of objects and number words from one to twenty on a table.
- Ask groups to take turns to pair up the sets and number word cards and place them on the table.
- Time each group; the group that takes the least time to match all the cards wins.

Activity 2

- Ask pupils to look at Activity 3.3.
- Read the instruction, 'Count and match each set to the correct number word.'
- First count the car mirrors together. (20)
- Ask pupils to spell t-w-e-n-t-y, and join the set of mirrors to the word twenty using pencils and rulers.
- Repeat for the second set. (14; f-o-u-r-t-e-e-n)
- Ask pupils to match the other 2 sets themselves.
- Read the instruction, 'Write the number.' Ask pupils to practise writing 20.

Additional activities

Activity 3

- Give pupils sets of Worksheet 34 on which they should draw a given number of aubergines.

3.4 Helmets



Suggested duration

40 minutes

Objectives

Sequence numbers.
Write numbers up to 20.

Required resources

- Flashcards of 1 to 20 objects
- flashcards of numbers 1 to 20
- Additional:
worksheet to complete number sequences up to 20

Correctly sequence and write numbers up to 20

Activity 1

- Use flashcards of sets of 1 to 20 objects and numbers 1 to 20 in sequence, as in previous units, to teach 20.
- Place the number cards in order on the board and count together from 1 to 20.

Activity 2

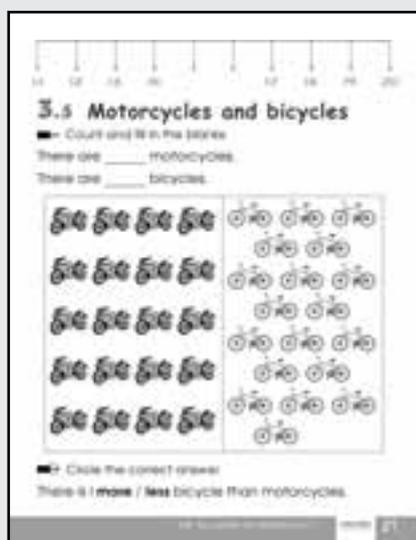
- Ask pupils to look at Activity 3.4.
- Read the instruction, 'Fill in the missing numbers in each row.'

- Ask pupils to look at the first set of red and white helmets.
- Point to the sequence of number cards on the board and ask pupils to look at the sequence starting from 8.
- Place this group of 6 numbers, 8 to 13, in a separate group on the board.
- Point to the numbers in turn and ask students to say 'the number that comes after' each of them.
- Guide pupils to use this sequence to write the missing numbers on the helmets.
- Complete the other sequences in the same way.
- Read the instruction, 'Write the number.' Ask pupils to practise writing 20.
- Additional activities

Activity 3

- Give pupils a worksheet showing incomplete number sequences up to 20.
- Ask pupils to complete the sequences by writing the missing numbers.

3.5 Motorcycles and bicycles



Suggested duration

40 minutes

Objectives

Recognize the difference of 1.

Required resources

- felt board
- felt vehicles
- Additional:
worksheet to circle the set with 1 fewer

Key terms

motorcycle
bicycle

Recognizing the difference of 1

Activity 1

- Prepare a felt board and two sets of felt vehicles, one containing 1 fewer vehicle than the other.
- Ask 2 pupils to take one set of felt vehicles each and place them on the board in two columns so that they match one-to-one.
- Elicit that one set contains 1 vehicle fewer than the other.
- Ask pupils to point to that set and repeat after you '1 fewer'.

- Repeat the activity with different pupils, and vary the number of felt vehicles.
- Emphasize the concept of '1 fewer'.

Activity 2

- Ask pupils to look at Activity 3.5.
- Read the instruction, 'Count and fill in the blanks'.
- Count the motorcycles together and ask pupils, to write 20' in the first blank.
- Read together, 'There are 20 motorcycles'.
- Repeat for the bicycles. (19)
- Elicit that there is 1 fewer bicycle than motorcycles.
- Look at the first set, identify the object, and ask pupils to circle 'fewer'.

Additional activities

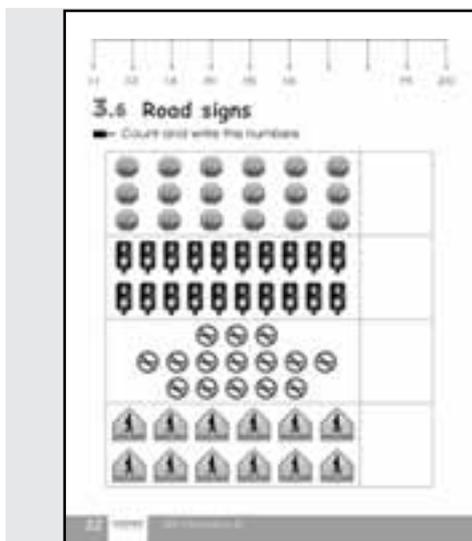
Activity 3

- Ask pupils to raise their hands if their parents bring them to school on motorcycles.
- Ask pupils to raise their hands if their parents bring them to school on bicycles.
- Allow pupils to share which mode of transport they prefer.

Activity 4

- Give pupils Worksheet 35 showing different sets of identical items and ask them to circle the set in each row that has 1 fewer than the set on the left.

3.6 Road signs



Suggested duration

40 minutes

Objectives

Count up to 20.

Required resources

- flashcards of different sets of objects
- flashcard of number 20
- Additional:
worksheet to count and write the number.

Counting up to 20

Activity 1

- Ask pupils to form groups of 4 or 5 to play a game to identify the card that shows 20 objects.
- Show flashcards of different sets. When a pupil counts 20 objects, s/he should raise a hand and call 'twenty'. If correct, that group scores a point; if incorrect the group loses a point. At the end of the game, the group with the most points wins.

Activity 2

- Ask pupils to look at Activity 3.6.
- Read the instruction, 'Count and write the numbers'.
- Ask pupils to identify the first sign (stop sign), and count them together. (18)
- Ask pupils to write 18 in the box beside the signs.
- Repeat for the traffic lights. (20)
- Ask pupils to count the 'No horns' and 'School' signs and write the numbers themselves.

Additional activities

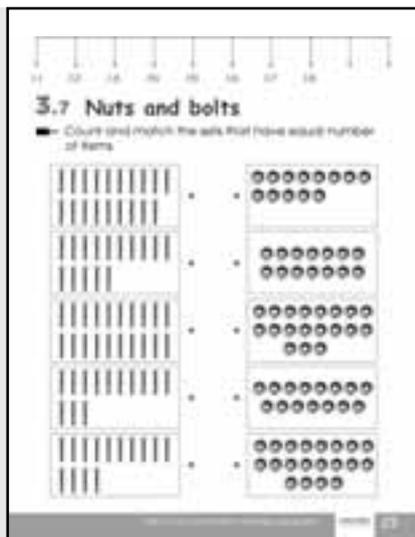
Activity 3

- Ask pupils to describe some of the road signs that they see.
- Take pupils on a walk around the school neighbourhood to identify some common road signs.

Activity 4

- Give pupils a worksheet showing different sets of up to 20 objects. Ask pupils to count the objects in each set and write the numbers.

3.7 Nuts and bolts



Suggested duration

40 minutes

Objectives

Count and match corresponding sets.

Required resources

- flashcards of different sets of objects
- Additional:
worksheet with a picture of 20 cars
star stickers

Counting and matching corresponding sets

Activity 1

- Show flashcards of the same numbers of 2 different objects, e.g. 18 trucks and 18 wheels.
- Ask pupils to count the trucks and the wheels. Elicit that there is the same number of each and explain that the two cards are a match.
- Lead pupils to say, 'The number of trucks and wheels are equal'.
- Repeat with other pairs of cards, some matching and some that do not match. Ask pupils to say which sets are equal and which are not equal.

Activity 2

- Ask pupils to look at Activity 3.7.
- Read the instruction, 'Count and match the sets that have equal number of items.'
- Point to and count together the set of bolts. (19)
- Ask pupils to count each set of nuts to see which set has 19. (the third set)
- Ask pupils to match the first set of bolts to the third set of nuts using a pencil and a ruler.
- Ask pupils to count and match the other sets themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have ever tried to thread a nut onto a bolt.
- You could bring nuts and bolts to class for pupils to try threading a nut onto a bolt.

Activity 4

- Give pupils a worksheet showing 20 cars and a set of star stickers.
- Ask them to stick one sticker on each car.
- Ask pupils to count the star stickers they have used. (20) Elicit that the number of cars is equal to the number of stickers.

3.8 Bicycle wheels



Suggested duration

40 minutes

Objectives

Add 'one more'.

Required resources

- magnetic board or white board
- magnetic circles
- Additional:
worksheet to draw one more.

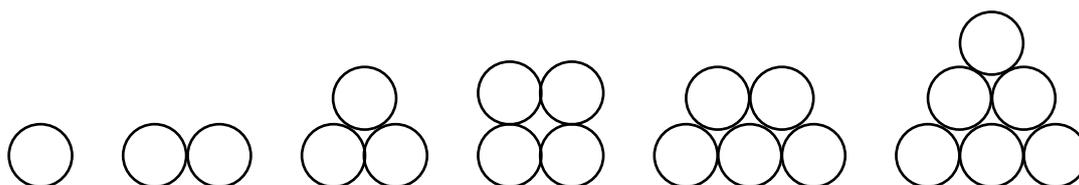
Key terms

bicycle
wheel

Add 'one more'

Activity 1

- Arrange magnetic circles as shown below on a magnetic board or the whiteboard.
- Write the number '1' below the first circle.



- Ask, 'What is 1 more than 1?' Guide pupils to answer by looking at the second set of circles. (2)
- Ask, 'What is 1 more than 2?' Guide pupils to say '3'. Continue the activity to 6.
- Emphasize the concept of 'one more' as you go through each set of circles.

Activity 2

- Ask pupils to describe the picture in Activity 3.1.
- Read the instruction, 'Count and fill in the blanks'.

- Ask pupils to count the bicycle frames (10) and write 10 in the first blank.
- Read together, 'There are 10 bicycles'.
- Repeat for the wheels. (19)
- Recite the number sequence from 1 to 20, reminding pupils that each number is one more than the previous one.
- Ask, 'What is one more than 19? (20) Ask pupils to write '20' in the third blank.
- Read together, 'He needs one more to make 20 wheels'.
- Point out that each bicycle needs 2 wheels.

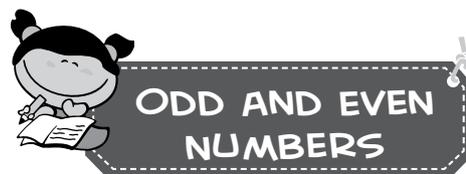
Additional activities

Activity 3

- Give pupils Worksheet 36 and ask them to count the items in the set on the left and draw a set on the right that contains 1 more.

Introduction

In this unit, pupils are introduced to the concept of odd and even numbers. By the end of the unit, pupils should be able to recognise and differentiate between odd and even numbers.



Pre-assessment activity

- Use flashcards to revise numbers 0 to 20 or ask pupils to show the numbers using their fingers.
- Ask 1 pupil to come to the front of the class. Elicit that he/she has no partner, and write 1 on the board.
- Ask a second pupil to come to the front and ask the pupils to hold hands. Elicit that they have a partner, ask how many pupils there are, and write 2 on the board and circle it.
- Ask a third pupil to come to the front. Elicit that the pupils holding hands have a partner but the third pupil does not. Write 3 on the board but do not circle it because not everyone has a partner.
- Ask a fourth student to hold hands with the third to make a second pair. Elicit that they have partners and write 4 on the board and circle it.
- Continue the activity for numbers up to 20; circle all the even numbers.



4.1 Sparrows



Suggested duration

1 hour

Objectives

Count in pairs.

Required resources

- pencils, bundled up in groups of 2
- Additional:
worksheet of number chart from 1 to 20

Key terms

sparrow

Count in pairs

Activity 1

- Prepare 10 bundles of pencils in groups of 2 and ask 10 pupils to come to the front of the class.
- Ask the 10 pupils to take a bundle each in turn.

- Ask the first pupil how many pencils he/she has and write 2 on the board.
- Repeat for the second pupil and count on 3, 4. Write 4 on the board.
- Continue the activity until all 10 pupils have 2 pencils each and the numbers 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 are written on the board.
- Ask pupils to count in pairs with you: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

Activity 2

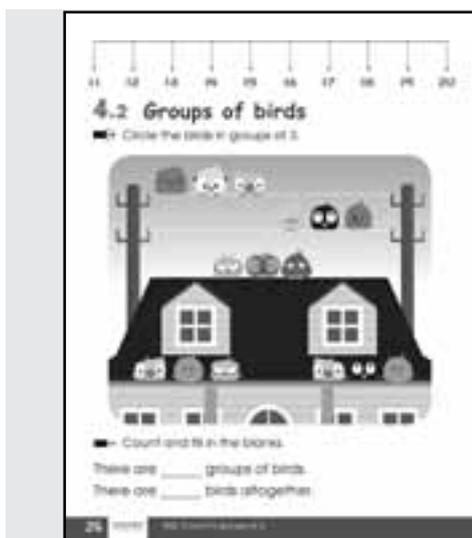
- Ask pupils to describe the picture in Activity 4.1.
- Read the instruction, 'Circle pairs of sparrows'. Explain that a pair is 2, e.g. a pair of shoes, etc.
- Guide pupils to count off 2 sparrows and use a pencil to draw a circle round them
- Help them to circle a second pair in the same way.
- Ask pupils to circle the other pairs of sparrows themselves.
- Read the instruction, 'Count and fill in the blanks'.
- Elicit that they have drawn 6 circles and ask them to write 6 in the first blank.
- Read together, 'There are 6 pairs of sparrows'.
- Ask pupils to count how many sparrows there are altogether; they can either count the sparrows one by one, or in pairs. There are 6 pairs, so they should count 2, 4, 6, 8, 10, 12.
- Guide pupils to write 12 in the second blank. Read together 'There are 12 sparrows altogether'.

Additional activities

Activity 3

- Give pupils Worksheet 37 and ask them to colour the square above every 2nd number. They should colour squares 2, 4, 6, 8, 10, 12, 14, 16, 18, 20.

4.2 Groups of birds



Suggested duration

40 minutes

Objectives

Count in groups of 3.

Required resources

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

Key terms

bird

Count in groups of 3

Activity 1

- Prepare 6 bundles of pencils, in groups of 3 and ask 6 pupils to come to the front of the class.
- Proceed as for Activity 4.1 to teach counting in 3s.
- Write on the board 3, 6, 9, 12, 15, 18, and ask pupils to count in groups of 3 with you, 3, 6, 9, 12, 15, 18.

Activity 2

- Ask pupils to look at Activity 4.2.
- Read the instruction, 'Circle the birds in groups of 3.'
- Guide pupils to count off 3 birds and use their pencils to draw a circle around them.
- Guide them to circle a second set of 3 in the same way.
- Read the instruction, 'Count and fill in the blanks.'
- Elicit that they have drawn 5 circles and ask them to write 5 in the first blank.
- Read together, 'There are 5 groups of birds.'
- Ask pupils to count how many birds there are altogether. They can count the birds one by one, or in groups of 3. There are 5 groups of 3, so they should count 3, 6, 9, 12, 15.
- Ask them to write 15 in the second blank. Read together, "There are 15 birds altogether".

Additional activities

Activity 3

- Give pupils Worksheet 38 and ask them to circle each of the sets in groups of 3.

4.3 Toucans

4.3 Toucans

● Circle each set in groups of 5.
● Fill in the missing numbers in the blanks.

There is _____ group of 5.
There are _____ toucans altogether.

There are _____ groups of 5.
There are _____ toucans altogether.

There are _____ groups of 5.
There are _____ toucans altogether.

Suggested duration

40 minutes

Objectives

Count in groups of 5.

Required resources

- sweets, packed in groups of 5
- Additional:
worksheet to draw 2 more groups of 5

Key terms

toucan

Counting in groups of 5

Activity 1

- Prepare 4 packets each containing 5 sweets, and ask 4 pupils to come to the front of the class.
- Use the packets of sweets to teach counting in 5s in the same way as the bundles of pencils were used in Activity 4.1 and 4.2 to teach counting in 2s and 3s.
- At the end of the activity, ask pupils to count in groups of 5 with you, 5, 10, 15, 20.

Activity 2

- Ask pupils to look at Activity 4.3.
- Read the instruction, 'Circle each set in groups of 5.'
- Ask pupils to count the toucans in the first set and to circle the group of 5 with pencil.
- Help pupils to do the same for the second and third groups of toucans.
- Read the instruction, 'Fill in the missing numbers in the blanks.'
- Ask pupils how many circles they drew in the first set (1) and ask them to write 1 in the first blank and 5 in the second
- Read together, 'There is 1 group of 5.' and 'There are 5 toucans altogether.'
- Guide pupils to complete the other 2 questions.

Additional activities

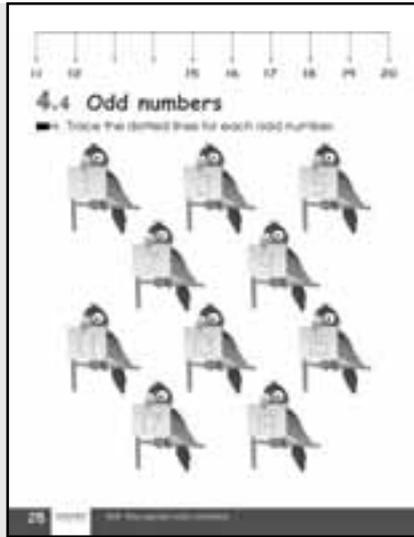
Activity 3

- Ask pupils to raise their hands if they have seen toucans.
- Ask pupils to describe toucans and say if they like them.

Activity 4

- Give pupils a worksheet showing 1 group of 5 objects. Ask them to draw 2 more groups of 5.

4.4 Odd numbers



Suggested duration

40 minutes

Objectives

Recognize odd numbers.

Required resources

- Additional:
worksheet to colour odd numbers

Key terms

odd number

Recognizing odd numbers

Activity 1

- Ask 2 pupils to come to the front of the class and form a pair.
- Ask more pupils to do the same. Elicit that 2 pupils must go to the front each time to form a pair.
- Ask all but 5 pupils to return to their seats; ask the 5 pupils to form pairs /find a partner.
- Elicit that when there are 5 pupils, 1 pupil will not have a partner. That pupil will be 'the odd one out.'
- Ask 2 pupils to return to their seats and ask the remaining 3 to form pairs. Elicit that again there is an 'odd one out.'
- Explain that if the number of pupils cannot form pairs, that number is an odd number.
- Tell pupils that 3 and 5 are odd numbers.
- Write on the board the odd numbers up to 20—1, 3, 5, 7, 9, 11, 13, 15, 17, 19.

Activity 2

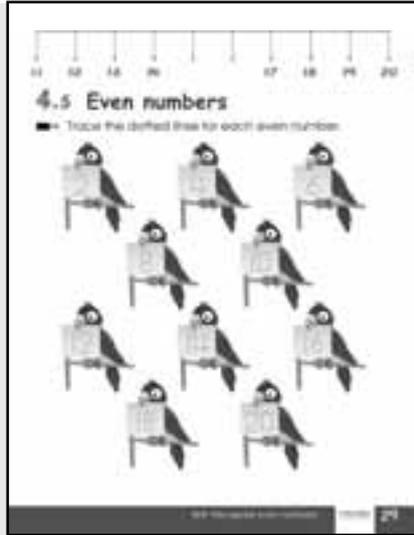
- Ask pupils to look at Activity 4.4.
- Read the instruction, 'Trace the dotted lines for each odd number.'
- Ask pupils to trace the odd numbers with a finger before tracing them in pencil.
- Ask pupils to point to and read out each odd number as they trace it.

Additional activities

Activity 3

- Give pupils Worksheet 39 and ask them to colour all the odd numbers.

4.5 Even numbers



Suggested duration

40 minutes

Objectives

Recognize even numbers.

Required resources

- Additional:
worksheet to colour even numbers

Key terms

even number

Recognizing even numbers

Activity 1

- Ask 2 pupils to come to the front of the class and form a pair. Say, '2'
- Instruct more pupils to come to the front of the class to form pairs and count as they do so.
- Elicit that 2 pupils must go to the front of the class each time to form a pair.
- Write on the board the even numbers up to 20—2, 4, 6, 8, 10, 12, 14, 16, 18, 20.
- Teachers could use the number chart in Activity 3, Unit 4.1 to show pupils that the even numbers are those they have coloured.

Activity 2

- Ask pupils to look at Activity 4.5.
- Read the instruction, 'Trace the dotted lines for each even number.'
- Complete as for Activity 2 of 4.4.

Additional activities

Activity 3

- Give pupils Worksheet 40 and ask them to colour all the even numbers.

4.6 Birds in cages



Suggested duration

40 minutes

Objectives

Identify an odd number quantity.

Required resources

- pencils
- sweets
- erasers
- Additional:
worksheet to identify odd number quantities

Key terms

cage
bird

Identify an odd number quantity

Activity 1

- Hold an odd number of pencils, e.g. 5, and ask 3 pupils to come to the front of the class.
- Ask each pupil to take 2 pencils: the first and second pupils will each take 2 but there will only be 1 for the third pupil.
- Elicit that you had an odd number of pencils.
- Ask pupils to count the pencils. (5) Elicit that 5 is an odd number.
- Repeat with 7 sweets and 4 pupils and 9 erasers and 5 pupils. Each time emphasize the odd number of items.

Activity 2

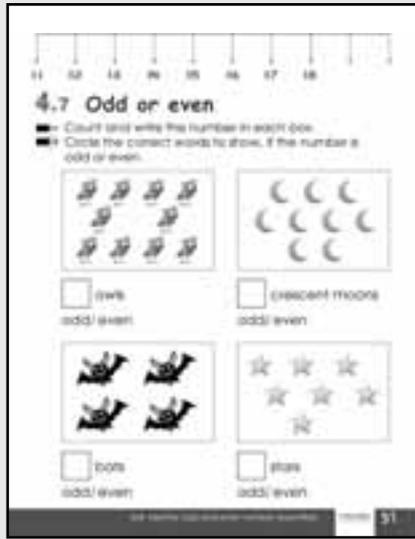
- Ask pupils to look at Activity 4.6.
- Read the instruction, 'Colour the cage that has an odd number of birds.'
- Ask pupils to count the birds in the first cage. (4)
- Help pupils to see that the birds can be grouped in pairs, so 4 is an even number.
- Repeat for the second cage (5 birds) and elicit that 5 is an odd number since the birds cannot be grouped in pairs.
- Ask pupils to colour the cage on the right.

Additional activities

Activity 3

- Give pupils Worksheet 41. Ask them to count the objects in each set and tick those that contain an odd number of objects.

4.7 Odd or even



Suggested duration

40 minutes

Objectives

Identify odd and even number quantities.

Required resources

- flashcards of different sets of objects
- flashcards of 'odd' and 'even'
- Additional:
worksheet to identify odd and even number quantities

Key terms

owl
crescent moon
bat
star

Identifying odd and even number quantities

Activity 1

- Show flashcards of different sets of objects and ask pupils to identify and count the objects.
- Ask if the number of objects is odd or even. If it is even, show the 'even' flashcard and ask pupils to say 'even'; if it is odd, show the 'odd' flashcard and ask pupils to say 'odd'.
- Repeat the activity until pupils are comfortable with identifying odd and even numbers of objects.

Activity 2

- Ask pupils to look at Activity 4.7.
- Read the instruction, 'Count and write number in each box.'
- Point to and count the owls together, (10) and ask pupils to write 10 in the box beside the owls.
- Repeat for the crescent moons. (9)
- Ask pupils to count the bats and stars themselves and write the numbers.
- Read the instruction, 'Circle the correct words to show if the number is odd or even.'
- Ask pupils to raise their hands if they think the number of owls is odd / even. Guide pupils to circle the word 'even' for the set of owls.
- Ask pupils to circle the correct words for the remaining questions.

Additional activities

Activity 3

- Give pupils Worksheet 42. Ask them to count the items in each set and say if it is odd or even.

4.8 Flamingoes



Suggested duration

40 minutes

Objectives

Differentiate odd and even numbers.

Required resources

- flashcards – odd number, even number
- flashcards of numbers 1 to 20
- Additional:
worksheet for odd and even number recognition

Differentiate odd and even numbers

Activity 1

- Ask pupils to work in groups of 4 or 5.
- Show a number card and award a point to the first pupil to raise a hand and correctly identify it as odd or even.
- Show the number card and the corresponding odd number / even number flashcard when pupils have answered correctly to reinforce the odd / even number to the class.
- Repeat the activity with different numbers; the group with most points at the end wins.

Activity 2

- Ask pupils to describe the picture in Activity 4.8.
- Read the instruction, 'Write 'odd' or 'even' in each box.'
- Ask pupils to look at the first flamingo and elicit that 15 is an odd number. Ask them to write 'odd' in the box below.
- Repeat for the second flamingo. (18; even)
- Ask pupils to complete the exercise themselves.

Additional activities

Activity 3

- Ask pupils to raise their hands if they have seen flamingos.
- Ask pupils to describe flamingos. For example, 'They are pink, they stand on one leg.'

Activity 4

- Give pupils Worksheet 43. Ask them to look at each number and circle the correct word.

Introduction

In this unit, pupils are introduced to the concept of odd and even numbers. By the end of the unit, pupils should be able to recognise and differentiate between odd and even numbers.



Pre-assessment activity

- Use flashcards to revise numbers 0 to 20 or ask pupils to show the numbers using their fingers.
- Ask 1 pupil to come to the front of the class. Elicit that he/she has no partner, and write 1 on the board.
- Ask a second pupil to come to the front and ask the pupils to hold hands. Elicit that they have a partner, ask how many pupils there are, and write 2 on the board and circle it.
- Ask a third pupil to come to the front. Elicit that the pupils holding hands have a partner but the third pupil does not. Write 3 on the board but do not circle it because not everyone has a partner.
- Ask a fourth student to hold hands with the third to make a second pair. Elicit that they have partners and write 4 on the board and circle it.

Continue the activity for numbers up to 20; circle all the even numbers.



5.1 The playground

Suggested duration

1 hour

Objectives

Add using number bonds.

Required resources

- picture of a circus
- Additional:
worksheet to count and write the numbers

Key terms

children
playground
spectacles
swing
slide

Add using number bonds

Activity 1

- Show a picture of a circus similar to the one below on the OHP.
- Talk about and ask questions about the picture.

For example,

There are 7 children at the circus. 5 are boys and 2 are girls.

2 children are holding balloons and 5 are not.

Ask pupils, 'How many children are holding lollipops and how many are not?'

Ask pupils, 'How many children are holding a teddy bear and how many are not?'



Activity 2

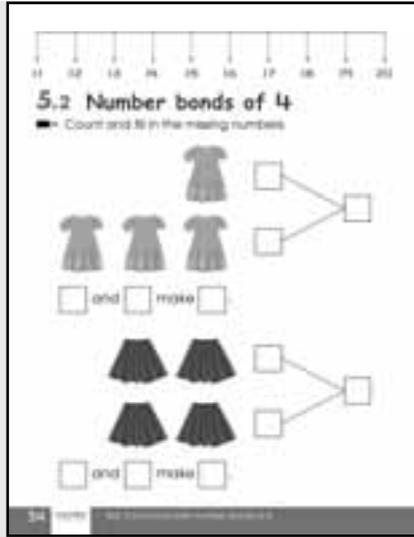
- Ask pupils to describe the picture in Activity 5.1.
- Read the statement, 'There are 6 children at the playground.' Ask pupils to point to each child and count. Are there 6 children?
- Read the second statement, '4 are boys and 2 are girls.'
- Ask pupils to point to and count the boys and then the girls.
- Read the third statement, '3 children wear spectacles and 3 do not.' Ask pupils to identify the 3 children in each group.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to point to the child on the swing. Count / elicit that there is 1 child on the swings.
- Guide the pupils to write 1 in the first blank. Read together, '1 child is on the swing.'
- Repeat for the children on the slide. (5)

Additional activities

Activity 3

- Give pupils Worksheet 44. Ask them to count the objects and write the numbers.

5.2 Number bonds of 4



Suggested duration

40 minutes

Objectives

Count and write number bonds of 4.

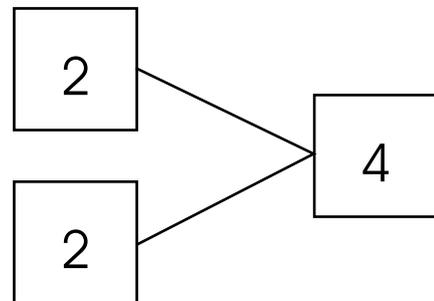
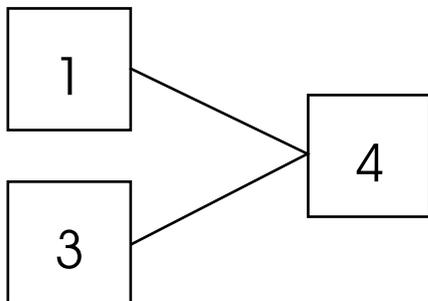
Required resources

- building blocks
- 4 lollipops
- Additional:
worksheet to count and write the numbers

Count and write number bonds of 4

Activity 1

- Place 4 lollipops on the table and ask 2 pupils to come to the front of the class.
- Give 1 lollipop to one pupil and 3 lollipops to the other.
- Draw on the board a number bond similar to the one shown below.
- Ask the first pupil 'How many lollipops do you have?' When the first pupil says '1', hold up 1 building block and write 1 in the first box of the number bond.
- Ask the second pupil, 'How many lollipops do you have?' When the pupil says '3', hold up 3 building blocks and write 3 in the second box of the number bond.
- Ask 'How many lollipops do you have altogether?' Pupils should count and say '4'.
- Join the 4 building blocks together to show pupils. Write 4 in the third box of the number bond.
- Repeat the activity, giving each pupil 2 lollipops.
- Write the number bonds as follows:



Activity 2

- Ask pupils to look at Activity 5.2.
- Read the instruction, 'Count and fill in the missing numbers.'
- Ask pupils to look at and count the first yellow dress, (1) and write 1 in the first box.
- Ask pupils to count the 3 yellow dresses and write 3 in the lower box.
- Ask, 'What is the total number of dresses?' Pupils should count and say '4'.
- Guide pupils to write 4 in the box on the right.
- Help pupils to complete the number sentence below by writing '1 and 3 make 4.' Read the sentence together.
- Repeat for the red skirts and create the number sentence, '2 and 2 make 4.' Read the sentence together.

Additional activities

Activity 3

- Give pupils Worksheet 45. Ask them to complete the number bonds by writing the numbers or by drawing the correct numbers of objects in the empty boxes.

5.3 Number bonds of 5

5.3 Number bonds of 5
Count and fill in the missing numbers.

4 and 1 make 5

2 and 3 make 5

Suggested duration

40 minutes

Objectives

Count and write number bonds of 5.

Required resources

- building blocks
- marbles of 2 different colours
- Additional:
worksheet to colour and write the number bonds of 5

Counting and writing number bonds of 5

Activity 1

- Prepare 5 marbles of 2 different colours, e.g. 3 red and 2 blue. Write the number bond boxes on the board.
- Ask pupils to count the red marbles; show 3 building blocks and write 3 in the first box.
- Repeat for the blue marbles. (2)

- Ask, 'How many marbles are there altogether?' Count together to 5, and put the 5 building blocks together. Write 5 in the third box of the number bond.
- Ask pupils to repeat after you, '3 and 2 make 5.'
- Repeat the activity with 2 red marbles and 3 blue marbles to teach '2 and 3 make 5.'

Activity 2

- Ask pupils to look at Activity 5.3.
- Read the instruction, 'Count and fill in the missing numbers.'
- Ask pupils to count the sets of shorts and guide them to write 1 and 4 in the boxes.
- Elicit that there are 5 pairs of shorts altogether and ask pupils to write 5 in the box on the right
- Guide pupils to write, '1 and 4 make 5', and ask them to read the sentence aloud.
- Repeat for the T-shirts to make the number sentence '2 and 3 make 5', and ask pupils to read the sentence aloud.

Additional activities

Activity 3

- Give pupils Worksheet 46. Ask them to write the correct numbers to make 5.

5.4 Number bonds of 6

Suggested duration

40 minutes

Objectives

Count and write number bonds of 6.

Required resources

- building blocks
- crayons of 2 different colours
- Additional:
worksheet to count and write the number bonds of 6

Key terms

shirts

Counting and writing number bonds of 6

Activity 1

- Prepare 6 crayons of 2 different colours, e.g. 4 yellow and 2 green and draw the number bond on the board.

- Proceed as for Activity 1 of Unit 5.3 to teach number bonds 4 and 2 make 6, and 1 and 5 make 6.

Activity 2

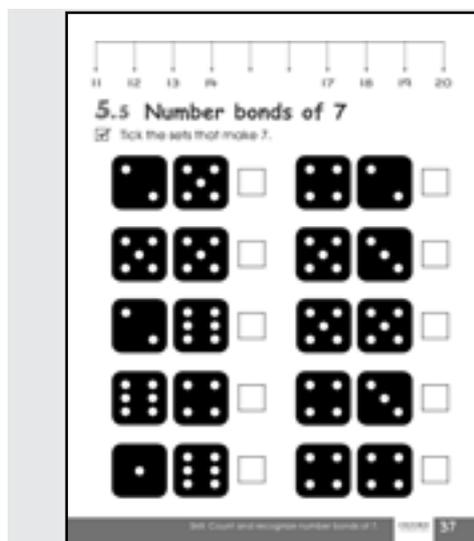
- Ask pupils to look at Activity 5.4.
- Read the statement, 'There are 6 shirts altogether.' Ask pupils to count the shirts to check.
- Read the instruction, 'Count and fill in the missing numbers.'
- Ask pupils to count the small shirts (3) and ask them to write 3 in the correct box.
- Repeat the activity for the other two sets of shirts. (5 + 1, and 4 + 2)
- Explain that the pupils have found three different ways to make a total of 6.

Additional activities

Activity 3

- Give pupils Worksheet 47. Ask them to count the shaded and unshaded squares in each set to complete the number bonds of 6.

5.5 Number bonds of 7



Suggested duration

40 minutes

Objectives

Count and recognize number bonds of 7.

Required resources

- 2 dice
- Additional:
worksheet to form number bonds of 7

Counting and recognizing number bonds of 7

Activity 1

- Ask pupils to form groups of 4 or 5 and give each group 2 dice.
- Ask the pupils to throw the 2 dice and count the number of dots on the 2 dice altogether.
- Whenever they count 7 dots, they should write down the number of dots on each of the so that they know the different ways to make 7.
- At the end of the activity, record on the board the different number bonds of 7.

Activity 2

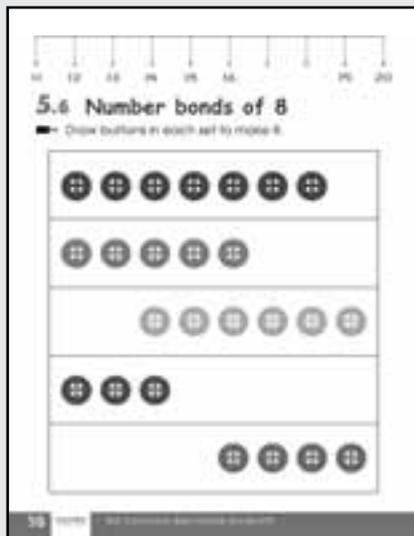
- Ask pupils to look at Activity 5.5.
- Read the instruction, 'Tick the sets that make 7.'
- Ask pupils to count the total number of dots on the first set of dice. (7) Ask pupils to tick the box beside the first set.
- Ask pupils to repeat after you, '2 and 5 make 7.'
- Ask pupils to count the total number of dots on the second set of dice. (6) Elicit that this box should not be ticked.
- Ask pupils to complete the rest of the activity themselves.

Additional activities

Activity 3

- Give pupils Worksheet 48. Ask them to sort the children into two groups in any way they like and then form number bonds based on the groupings.
- They should form 2 different number bonds of 7.
- Tell them to try other number bonds of 7.

5.6 Number bonds of 8



Suggested duration

40 minutes

Objectives

Count and draw number bonds of 8.

Required resources

- bean bags
- Additional:
 - worksheet with 8 empty squares
 - coloured paper
 - glue

Key terms

buttons

Count and draw number bonds of 8

Activity 1

- Clear a space at the front of the classroom and draw a line in the middle.
- Ask two pupils to come to the front of the class and stand behind the line.
- Give each pupil four small beanbags.

- Ask the pupils to take turns to throw beanbags one at a time to the other side.
- After both pupils have thrown the beanbags, ask them to count the beanbags on the far side of the line.
- Guide pupils to say, '_____ and _____ make _____.'
- Repeat the activity with other pupils so that different number combinations may be observed.

Activity 2

- Ask pupils to look at Activity 5.6.
- Read the instruction, 'Draw buttons in each set to make 8.'
- Ask pupils to count the purple buttons. (7)
- Ask, 'How many buttons are needed to make 8?' Show pupils how to count on to find the number. (1)
- Ask them to draw one more purple button.
- Repeat for the green buttons. (5 and 3)
- Ask pupils to complete the other 3 sets of buttons themselves.

Additional activities

Activity 3

- Give pupils Worksheet 49 and small squares of 2 different coloured colour paper and glue.
- Ask them to glue the coloured squares onto the worksheet to show 9 different ways to make 8.

5.7 Number bonds of 9

5.7 Number bonds of 9

Count and fill in the missing numbers

9 = 3 + 6

9 = 1 + 8

9 = 4 + 5

Suggested duration

40 minutes

Objectives

Count and write number bonds of 9.

Required resources

- building blocks
- buttons of 2 different colours or sizes
- Additional:
worksheet to form number bonds of 9

Counting and writing number bonds of 9

Activity 1

- Prepare 9 buttons of 2 different colours or sizes, e.g. 5 purple and 4 blue. Draw the number bond on the board.
- Use the buttons as in Activity 1 in 5.3 to teach number bonds of 9. ($5 + 4$; $3 + 6$)

Activity 2

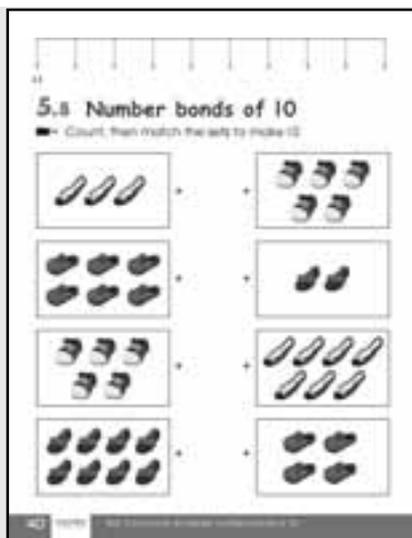
- Ask pupils to look at Activity 5.7.
- Read the instruction, 'Count and fill in the missing numbers.'
- Look at the first set of red caps and elicit that 3 has been written in the box.
- Ask pupils to count the second set of red caps and write 6 in the box.
- Read together, '3 and 6 make 9.'
- Ask pupils to count the second set of blue hats and write 8 in the box.
- Ask pupils to count all the blue hats and elicit that the total number is 9.
- Ask pupils to write 9 in the box and to repeat after you, '1 and 8 make 9.'
- Ask pupils to complete the third set of number bonds themselves.

Additional activities

Activity 3

- Give pupils Worksheet 50. Ask them to count the items in each set and complete the number bonds.

5.8 Number bonds of 10



Suggested duration

40 minutes

Objectives

Count and recognize number bonds of 10.

Required resources

- large piece of paper
- coloured dots
- Additional:
worksheet to solve number bonds using ten frame

Counting and recognizing number bonds of 10

Activity 1

- Place a large sheet of paper on the board.
- Give the pupils coloured dots of 2 different colours.
- Ask 1 pupil to come to the front of the class and stick 1 dot on the paper.
- Ask another pupil to come and paste the correct number of dots of the other colour to get 10 dots. The rest of the class should count on from 2 to 10 as s/he does this.
- Ask the pupil how many dots he/she has added. (9)
- Ask pupils to repeat after you, '1 and 9 make 10'.
- Repeat the activity for the other number bonds of 10.

Activity 2

- Ask pupils to describe the picture in Activity 5.1.
- Read the instruction, 'Count, then match the sets to make 10.'
- Ask pupils to count the first set of shoes. (3)
- Ask pupils to count on using their fingers to find how many more are needed to make 10. (7).
- Ask them to find the set of 7 shoes in the second column. Ask them to use a ruler and pencil to match the sets.
- Ask pupils to complete the activity themselves.

Additional activities

Activity 3

- Give pupils Worksheet 51. Ask them to count the two differently shaded squares to complete the number bonds of 10.

Introduction

In this unit pupils look back at the concepts they have learnt 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 pupils have carried out in the previous five units and revise the concepts they have learnt from them: counting 18, 19 and 20; odd and even numbers, counting in 2s, 3s, and 5s, and number bonds to 10.



6.1 Baking buns



Suggested duration

40 minutes

Objectives

- Count to 19.
- Add 1 to make 20.

Required resources

- sweets
- bowl
- flashcards of numbers 19 and 20
- Additional:
worksheet to count on to 20.

Key terms

bun
bake

Counting to 19, adding 1 to make 20

Activity 1

- Place on a table some sweets and a bowl that can hold 20 sweets.
- Count together as you put 19 sweets into the bowl and hold up the flashcard of number 19.
- Add one more sweet and ask how many sweets there are in the bowl. Pupils should count on from 19 to 20.
- Hold up the flashcard of number 20.

Activity 2

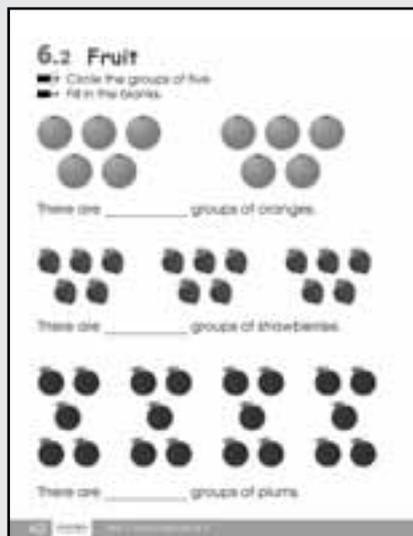
- Ask pupils to look at Activity 6.1.
- Read the statement, 'Sania's mother has to bake 20 buns.'
- Ask pupils to point to Sania's mother and the buns to check contextual comprehension.
- Read the sentence, 'Let us help her count the number of buns she has baked.'
- Read the instruction, 'Count the buns and fill in the blanks.'
- Point to and cut together the buns on the tray. (19)
- Ask pupils to write 19 in the first blank. Read together, 'Mother has baked 19 buns.'
- Ask pupils to count on to 20 and elicit that Mother needs 1 more bun to make 20.
- Ask pupils to write 1 in the blank and read together, 'She is short of 1 bun.'

Additional activities

Activity 3

- Give pupils a worksheet showing different sets of items. Ask them to draw more objects to make sets of 20.

6.2 Fruit



Suggested duration

40 minutes

Objectives

Count in groups of 5.

Required resources

- building blocks
- fruits
- Additional:
drawing paper

Key terms

orange
strawberry
plum

Counting in groups of 5

Activity 1

- Place 5 identical fruits on the table and ask pupils to count them. (5)
- Elicit /explain that you have 1 group of 5 and ask pupils to repeat '1 group of 5'.

- Place 10 identical fruits on the table and explain that you want to arrange them in groups of 5.
- Count together 5 pieces of fruit and then set these aside to make one group.
- Repeat with the second group of fruits.
- Elicit /explain that you have 2 groups of 5 and ask pupils to repeat '2 groups of 5'.
- Repeat the activity with other multiples of 5.

Activity 2

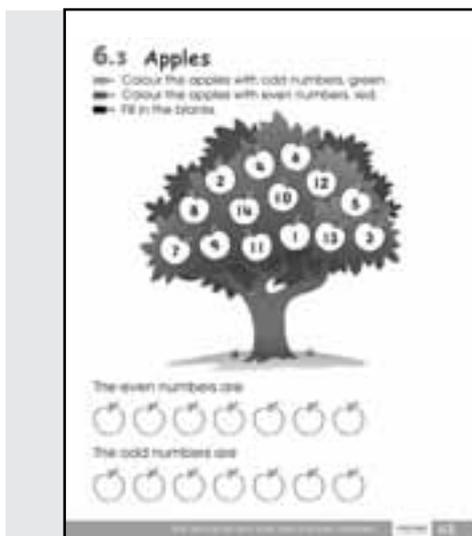
- Ask pupils to look at Activity 6.1.
- Read the instruction, 'Circle the groups of five.'
- Ask pupils to point to and count five oranges, and then draw a circle around them.
- Ask them to count the remaining oranges, (5) and draw a circle around them.
- Ask pupils to do the activity for the sets of strawberries and plums themselves.
- Read the instruction, 'Fill in the blanks.'
- Ask how many circles they drew in the first set. (2) Ask them to write '2' in the blank.
- Read together, 'There are 2 groups of oranges.'
- Ask pupils to fill in the blanks for the sets of strawberries and plums themselves.

Additional activities

Activity 3

- Give each pupil a sheet of drawing paper and ask them to draw one of their favourite fruits.
- Ask them to draw 20 of these fruits and circle them to make groups of 5.
- Ask them to share their drawings with the class.

6.3 Apples



Suggested duration

40 minutes

Objectives

Recognize and write odd and even numbers.

Required resources

- flashcards of numbers 1 to 20
- flashcards – odd numbers, even numbers
- Additional:
worksheet of odd and even number maze

Recognizing and writing odd and even numbers

Activity 1

- Place number flashcards from 1 to 20 on the board in sequence.
 - Revise the odd numbers: ask pupils to pick out the odd numbers. (1, 3, 5, 7, 9, 11, 13, 15, 17, 19.)
 - As each number is called, take it and form a separate set on the board.
 - Place the flashcard 'odd numbers' near that set and emphasize the term.
 - Ask pupils to look at the remaining numbers. And elicit that they are all even numbers.
 - Place the flashcard 'even numbers' near that set and emphasize the term.
- Ask pupils to recite the sequence of even numbers.

Activity 2

- Ask pupils to look at Activity 6.3.
- Read the instruction, 'Colour the apples with odd numbers, green.'
- Ask pupils to point to the apples with odd numbers before they colour them green.
- Repeat to colour the even numbered apples red.
- Read the instruction, 'Fill in the blanks.'
- Ask pupils to write the numbers themselves.

Additional activities

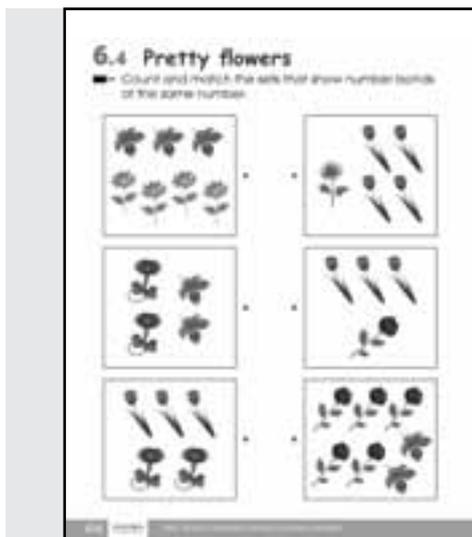
Activity 3

- Ask pupils if they have eaten red and green apples.
- Which colour apples do pupils prefer?

Activity 4

- Give pupils Worksheet 52. Ask them to colour all the even numbers to find the path from start to finish.

6.4 Pretty flowers



Suggested duration

40 minutes

Objectives

Match number bonds of same number.

Required resources

- stems of 2 different kinds of flowers
- Additional:
drawing paper

Matching number bonds of same number

Activity 1

- Place stems of 2 different kinds of flower on the table and ask 2 pupils to come to the front of the class. They should not be able to see what the other is doing.
- Ask them to take a combination of the 2 flowers to make a total of 7 flowers, e.g. 6 + 1 or 3 + 4
- Explain/elicit that the two bunches of flowers represent different number bonds of 7.
- Repeat the activity with other pupils and other total numbers of flowers.

Activity 2

- Read the instruction, 'Count and match the sets that show number bonds of the same number.'
- Ask pupils to count the first sets of flowers, write the number bond, and find the total number of flowers. (7) Elicit that '3 and 4 make 7.'
- Ask pupils to find a set of flowers in the right column that represents the number bond of 7. (the third set)
- Elicit that '5 and 2 make 7' and ask them to use a pencil and ruler to match the sets.
- Ask pupils to match the other sets themselves.

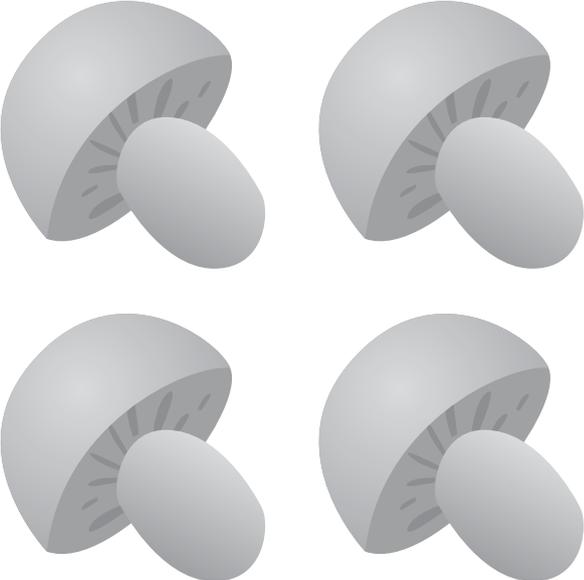
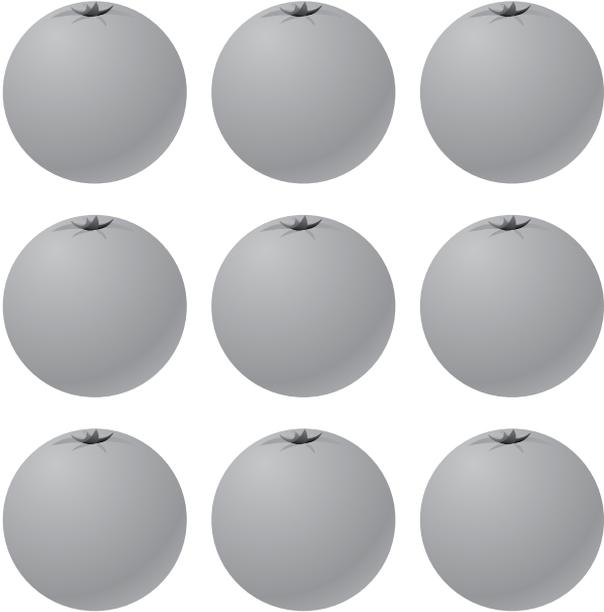
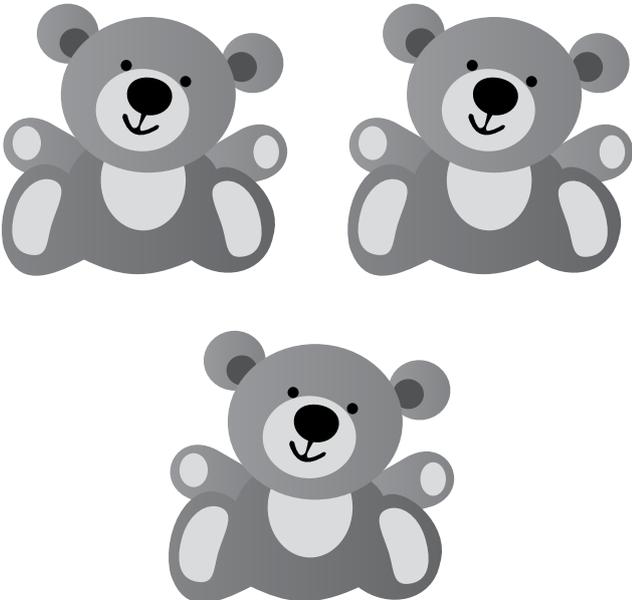
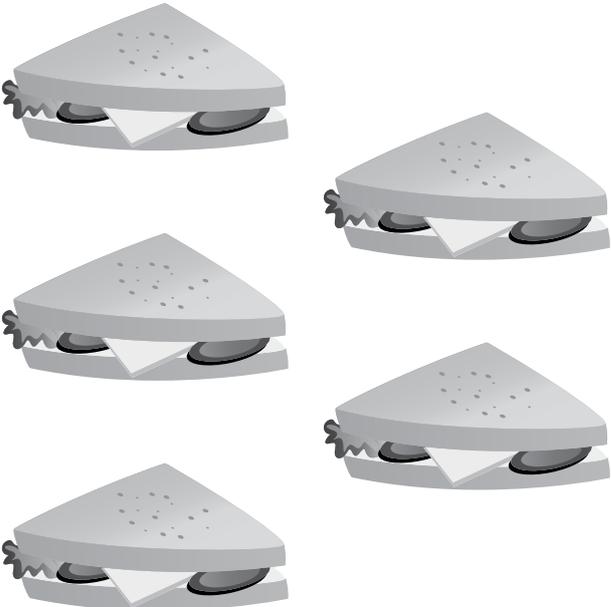
Additional activities

Activity 3

- Ask pupils to work in groups of 4 or 5 and give each group a sheet of drawing paper.
- Ask them to draw balloons of 2 different colours to make 10 balloons.
- Each of the pupils should draw balloons to represent a different number bond of 10.
- Ask pupils to share their drawings with the class and discuss the various number bonds of 10.

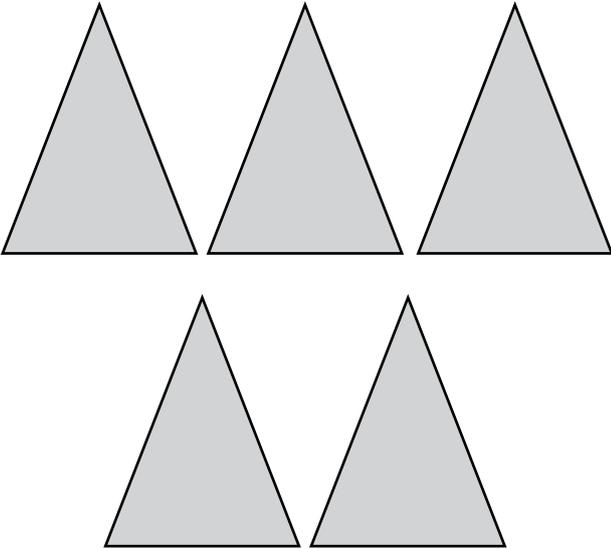
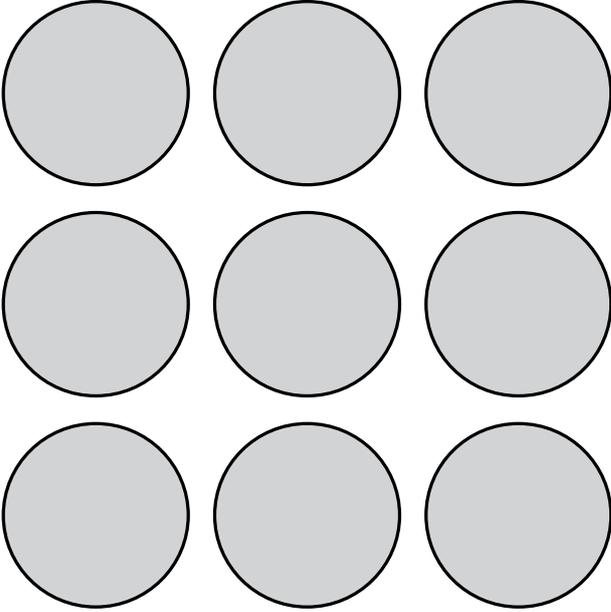
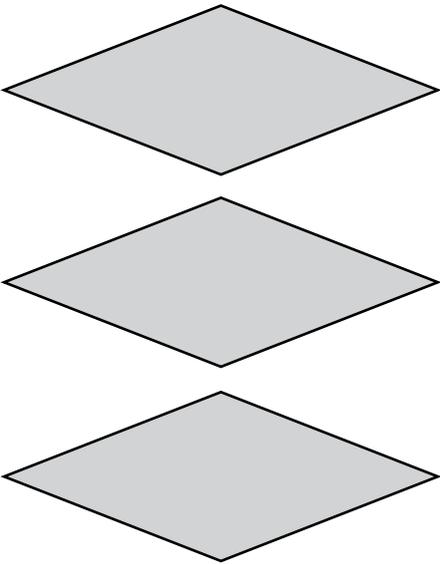
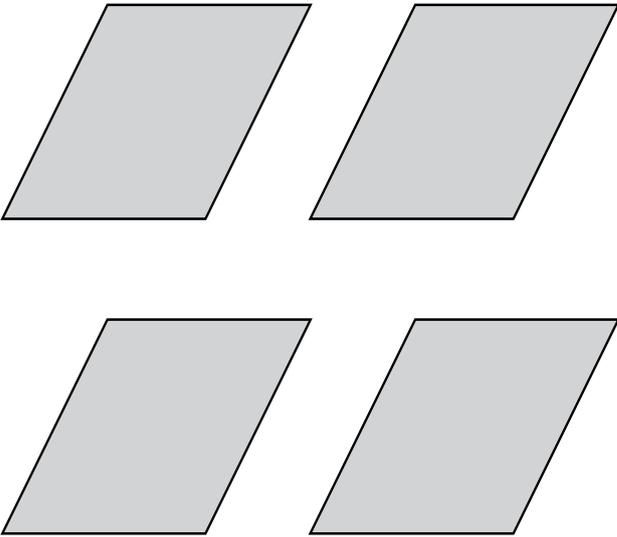
Worksheet 1

Count and write the numbers.

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>

Worksheet 2

Count and write the numbers.

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>

Worksheet 3

Complete the number sequences.

4		6	7
---	--	---	---

	3	4	
--	---	---	--

7		9	
---	--	---	--

	1		3
--	---	--	---

6			9
---	--	--	---

	6		
--	---	--	--

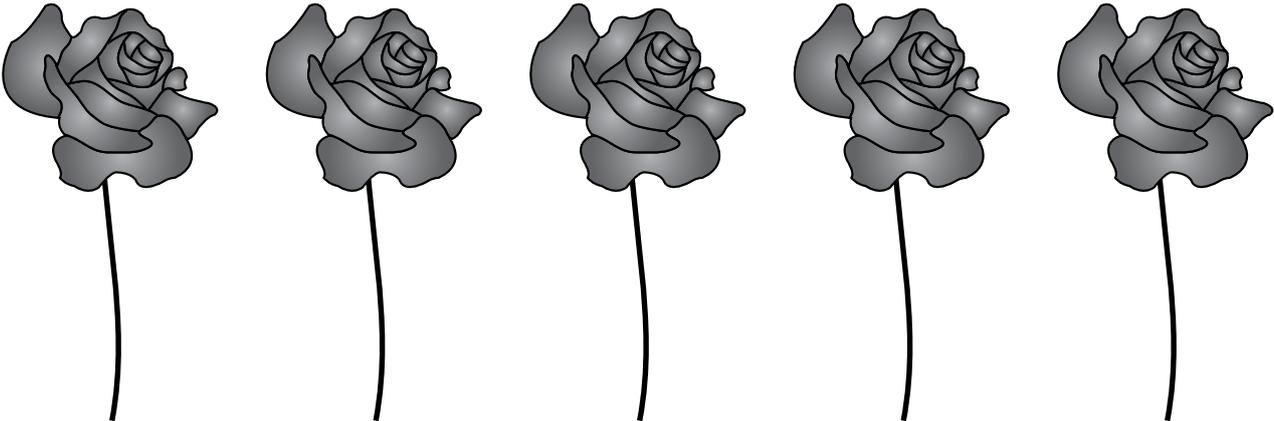
Worksheet 4

Match the chicks to the cats.

The image contains five cartoon cats and five cartoon chicks. The cats are striped and the chicks are round with a tuft of feathers on their heads. There are two empty boxes at the bottom right for marking the matches.

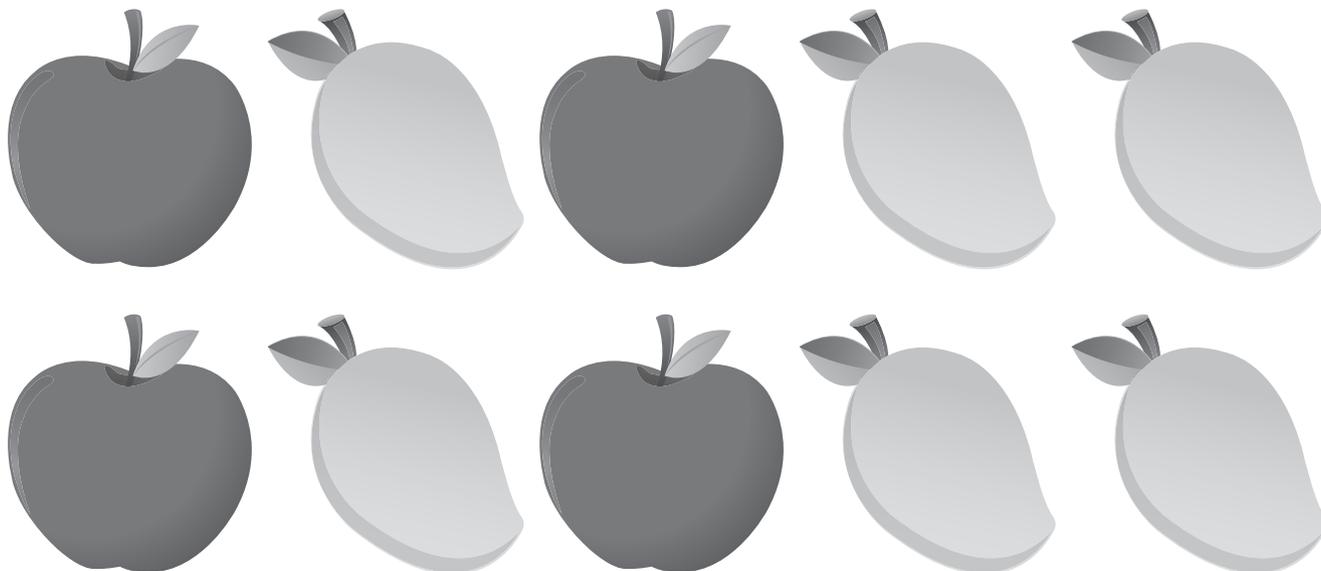
Worksheet 5

Cross (X) set with the most flowers and tick (✓) the set with the most fewest flowers.

	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

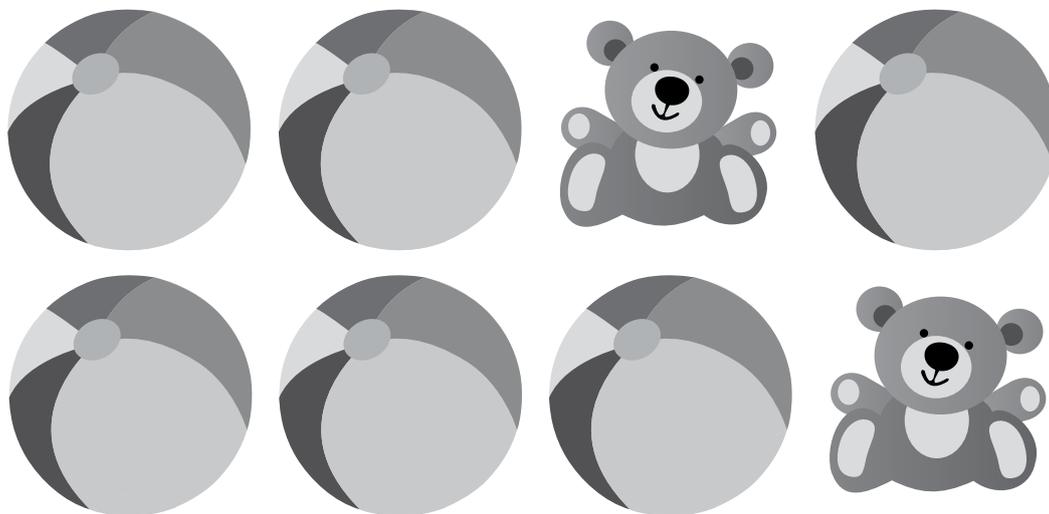
Worksheet 6

Count and write the numbers.



apples

mangoes



balls

teddies

Worksheet 7

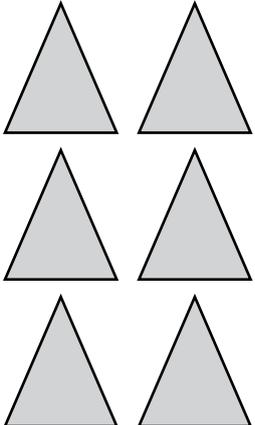
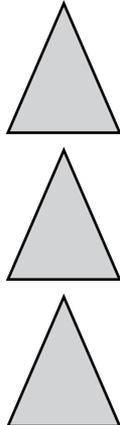
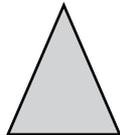
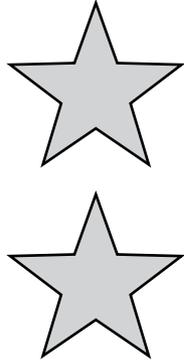
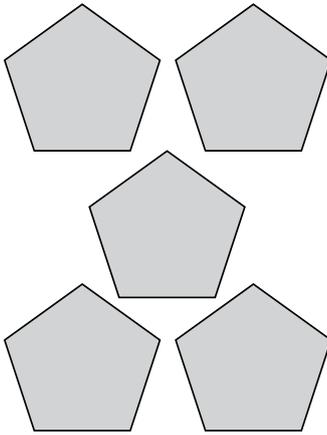
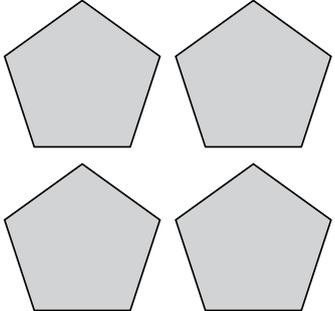
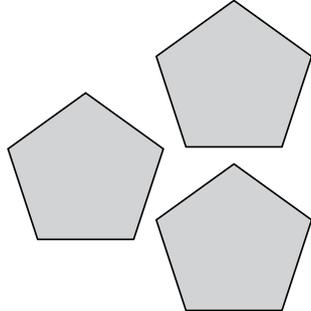
Count and write the numbers. Did every hen lay an egg?

			
			
			
			<input type="text"/>

					
					
					<input type="text"/>

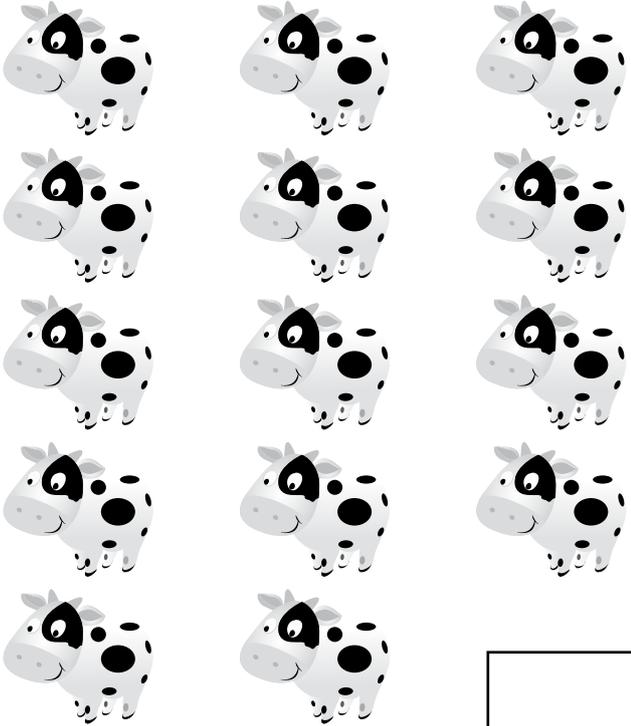
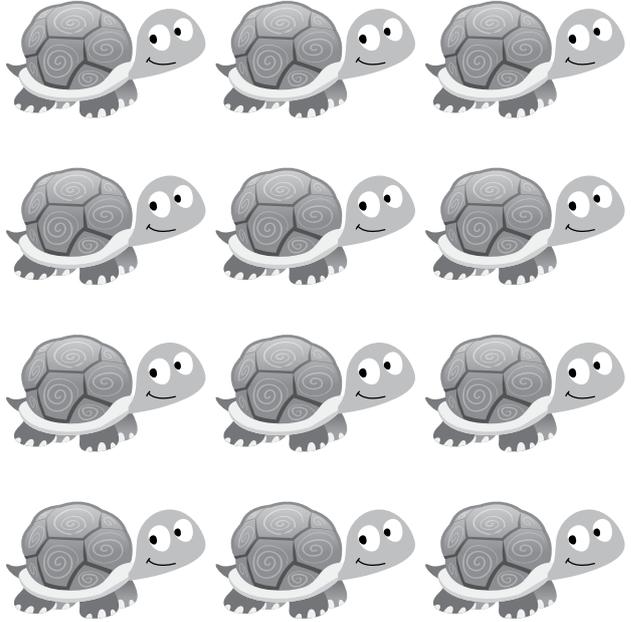
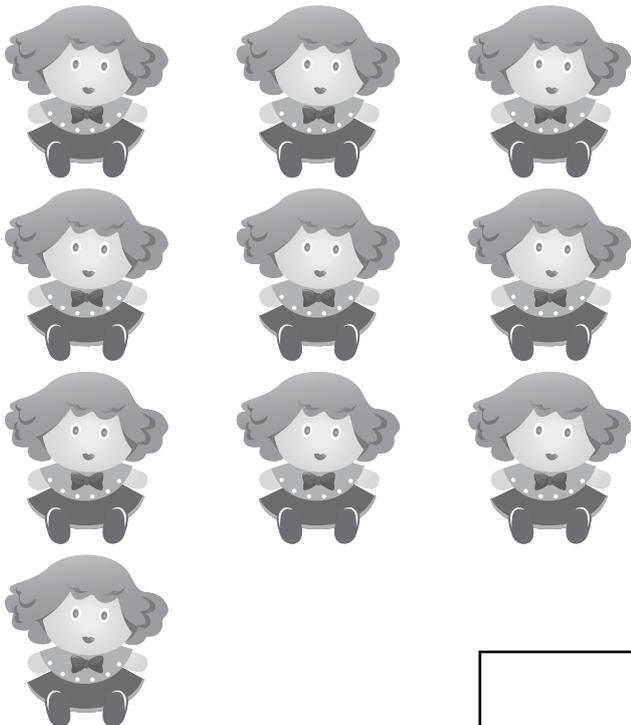
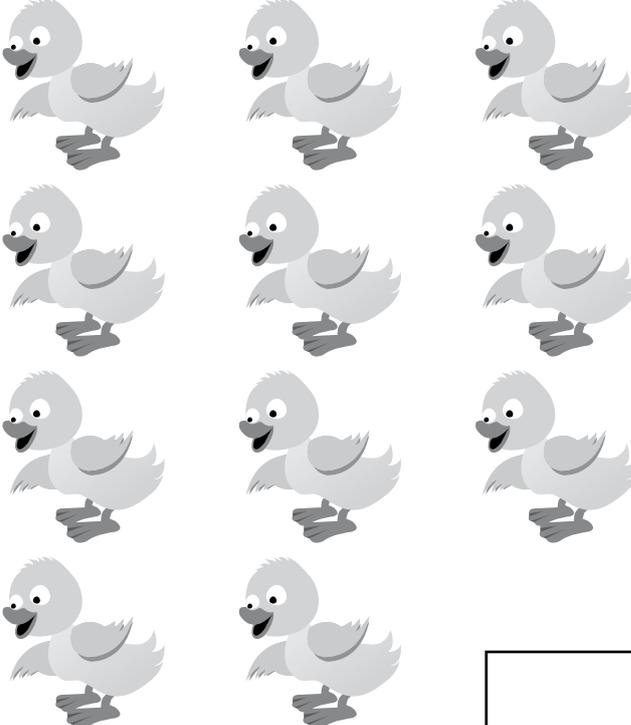
Worksheet 8

Count on in each set and write the number.

			<input type="text"/>
			<input type="text"/>
			<input type="text"/>

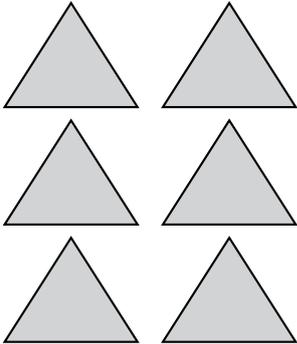
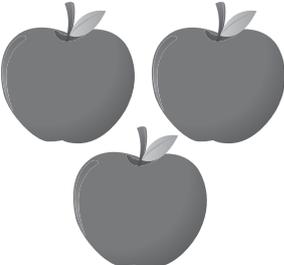
Worksheet 9

Circle 10 things and then count the total number.

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>

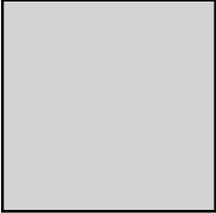
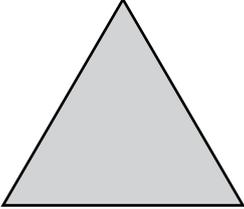
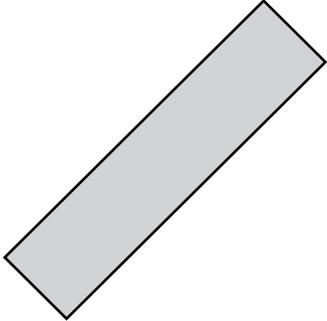
Worksheet 10

Count the objects in each set and then draw more to equal the total given.

		<div style="border: 1px solid black; padding: 10px; text-align: center;">15</div>
		<div style="border: 1px solid black; padding: 10px; text-align: center;">7</div>
		<div style="border: 1px solid black; padding: 10px; text-align: center;">9</div>

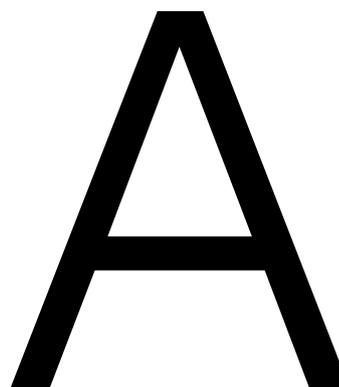
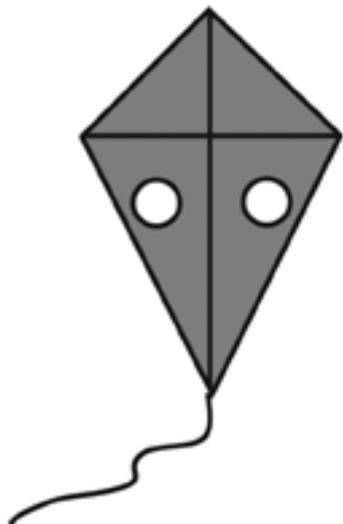
Worksheet 11

Paste the cut outs in the correct columns.

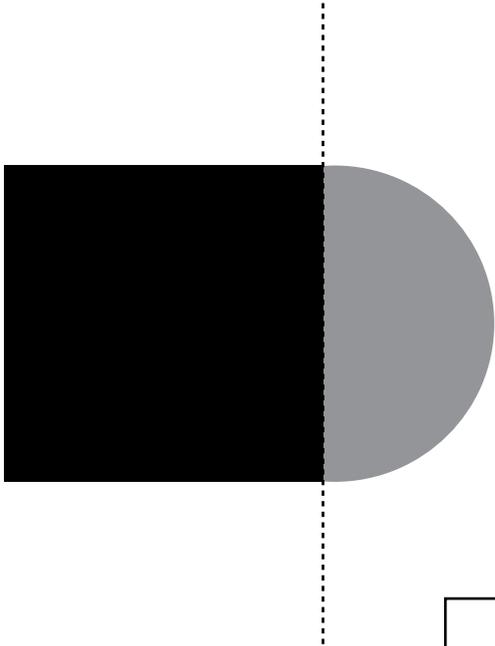
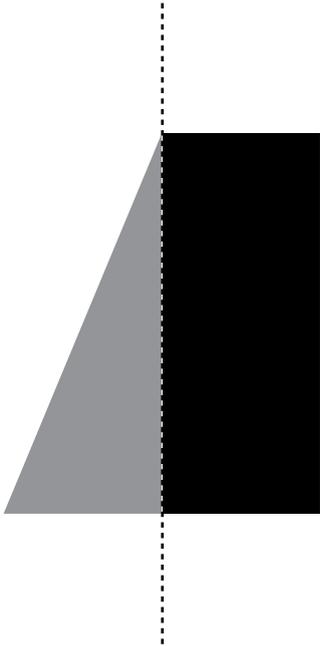
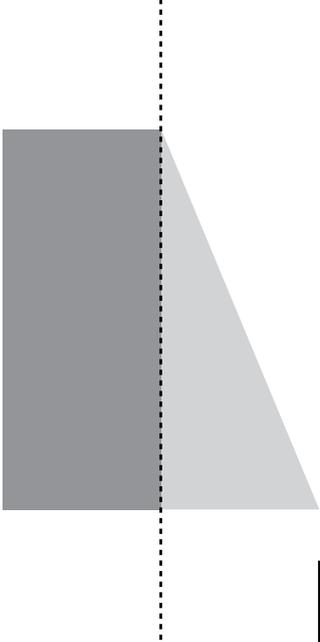
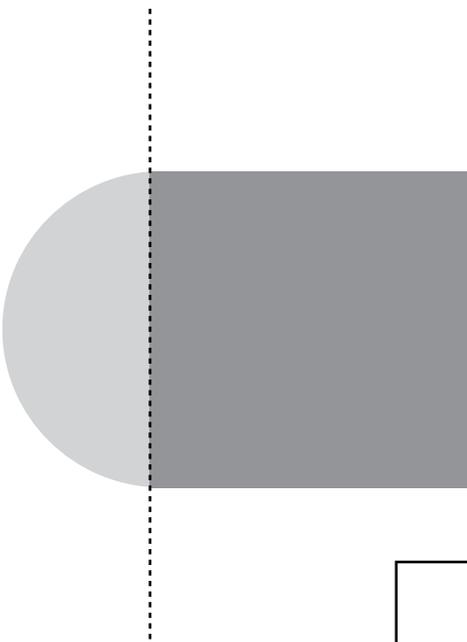
Worksheet 12

Identify the triangles in these objects.



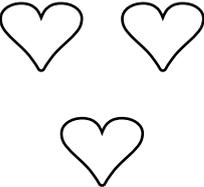
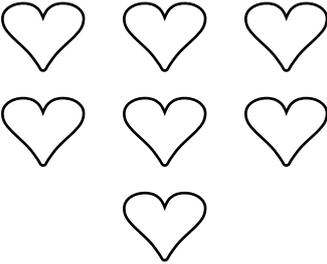
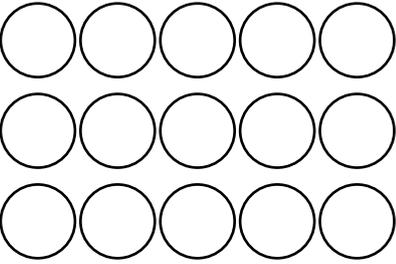
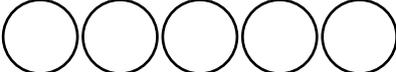
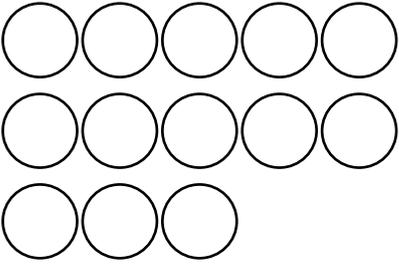
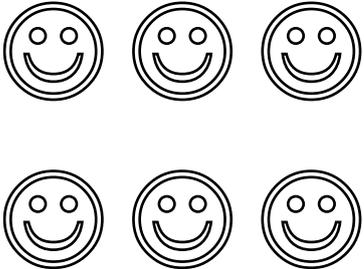
Worksheet 13

Cut out the shapes and match them to make a rectangle, triangle, circle, and a square.

 <input type="checkbox"/>	 <input type="checkbox"/>
 <input type="checkbox"/>	 <input type="checkbox"/>

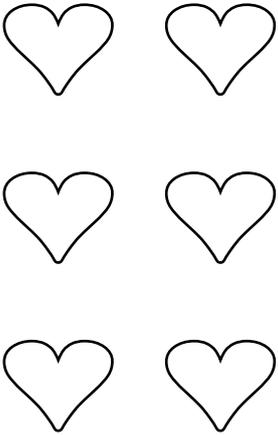
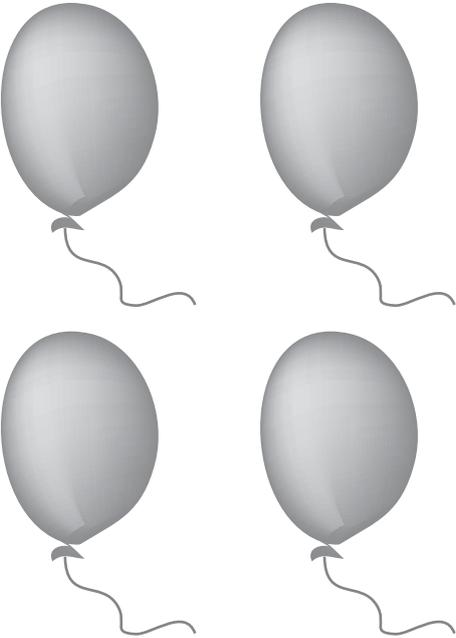
Worksheet 14

Count items in each row and then colour the sets as instructed.

 <input type="text"/>	 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>	 <input type="text"/>

Worksheet 15

Count the items in the first box, and then draw a set in the second box that contains more of the same item.

Worksheet 16

Draw objects to match each number word.

eight cupcakes

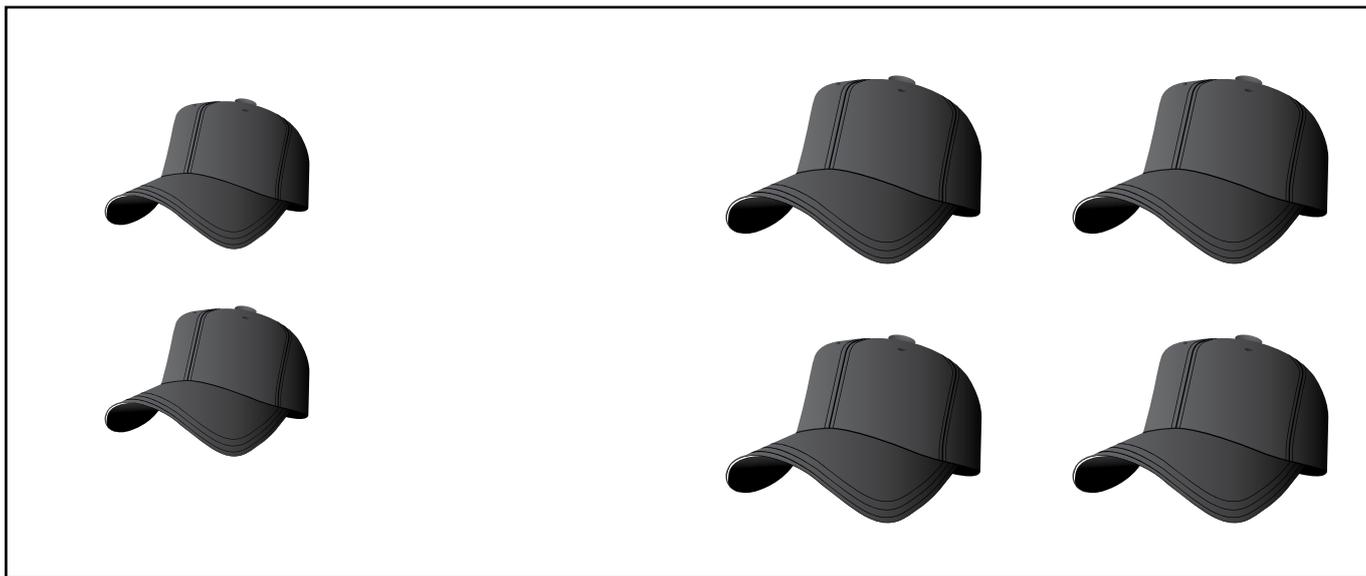
eleven ice creams

thirteen rolls

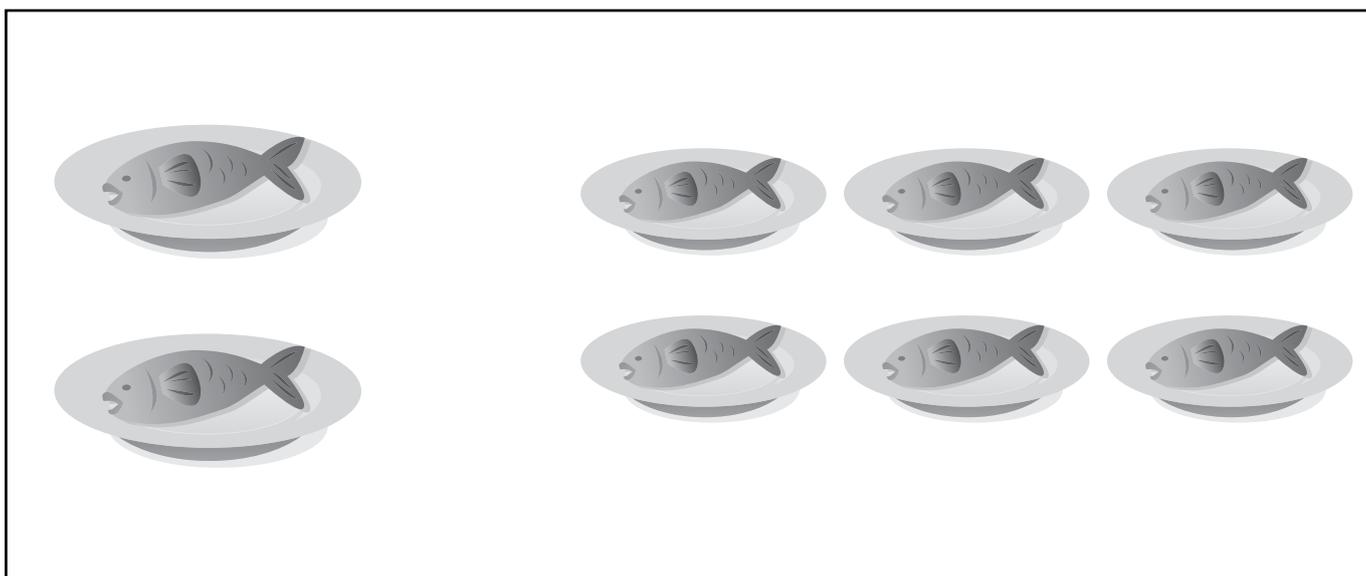
fifteen apples

Worksheet 17

Circle the set that has more.



Circle the set that has fewer.



Worksheet 18

Count on to find the total number in each set.

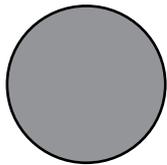
10 sandwiches

13 pencil sharpeners

10 snails

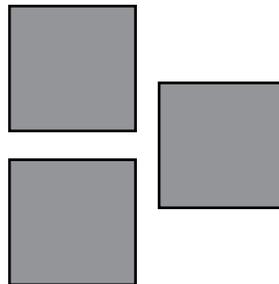
Worksheet 19

How many altogether?



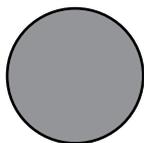
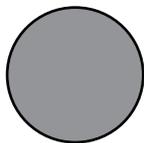
1

+



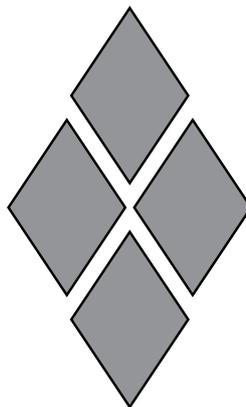
3

=



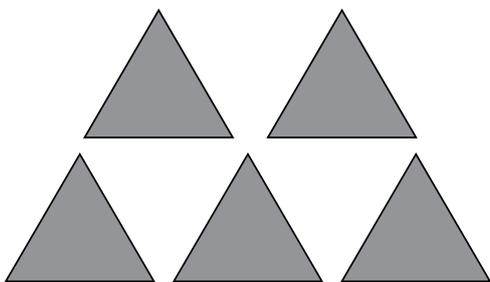
2

+



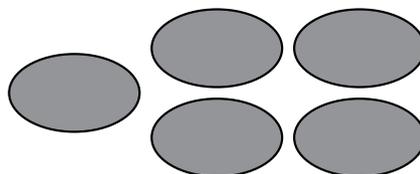
4

=



5

+

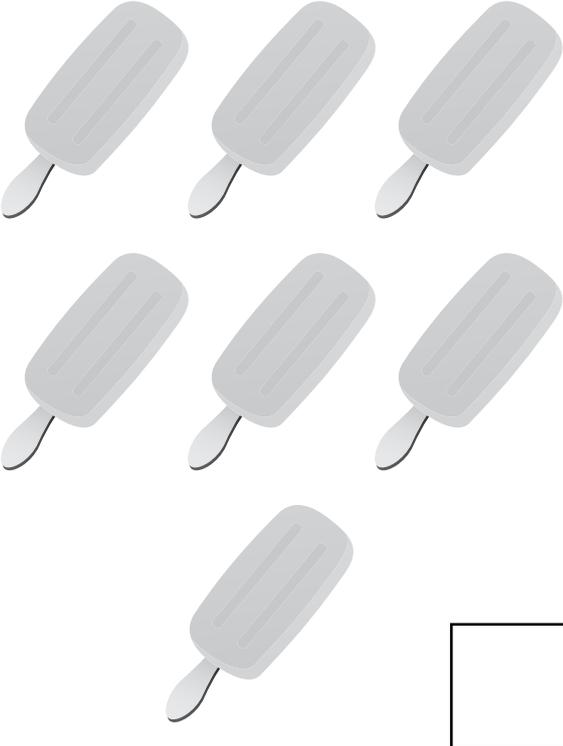
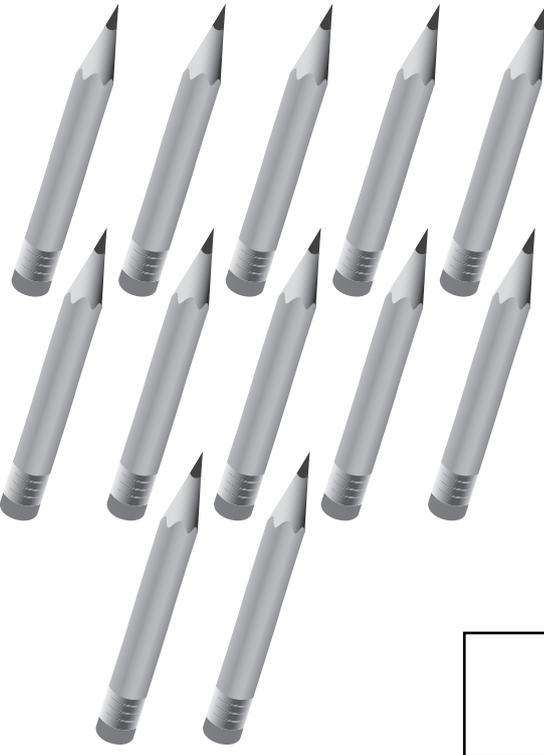


5

=

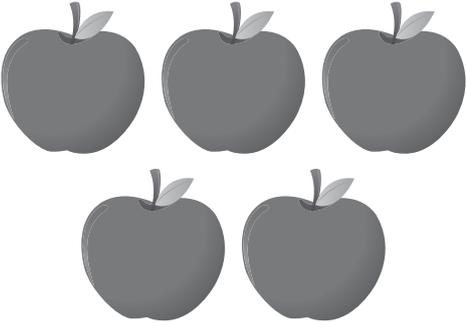
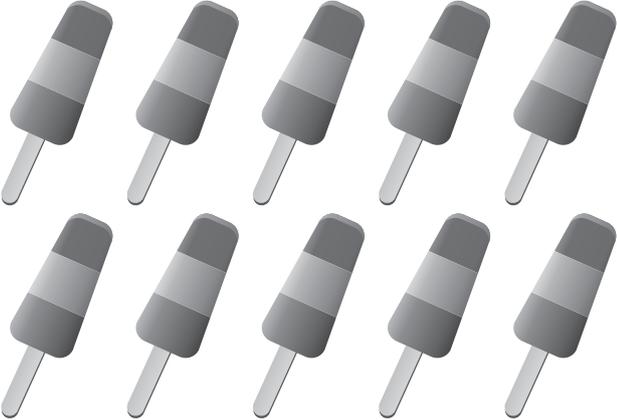
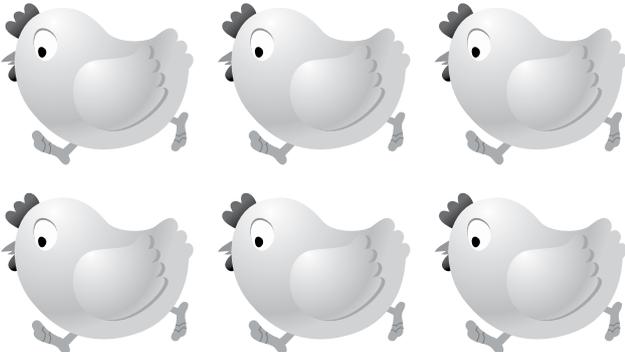
Worksheet 20

Count and write the number. Draw one more.

 <p>10</p>	
 <p>10</p>	

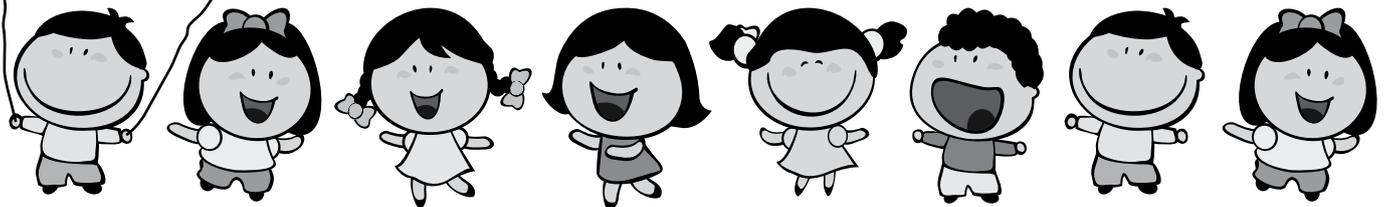
Worksheet 21

Count the objects in each set and then draw more to equal the total given.

	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto;">15</div>
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto;">17</div>
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto;">13</div>

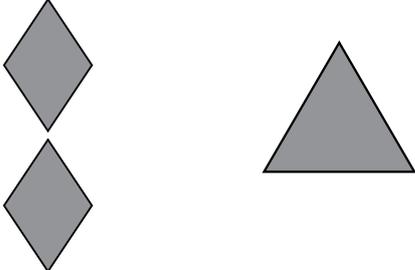
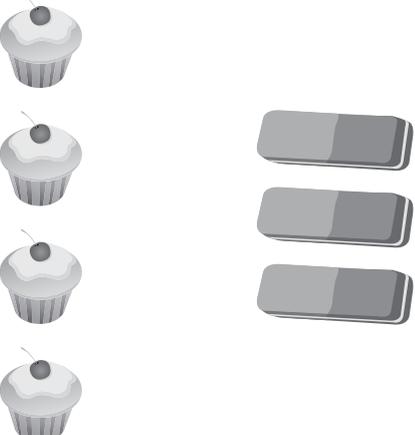
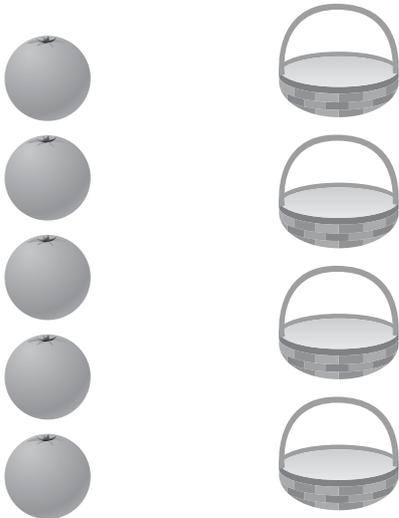
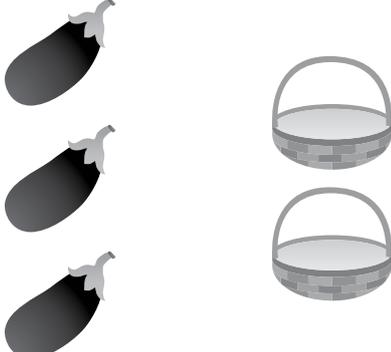
Worksheet 22

Draw more balloons so that each child has two balloons.



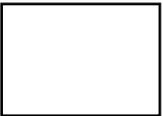
Worksheet 23

Match items in each set with a line. Circle the set with one more.

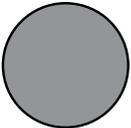
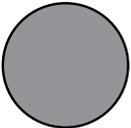
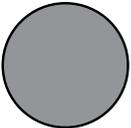
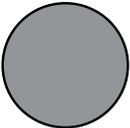
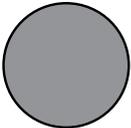
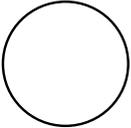
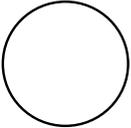
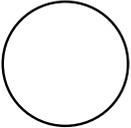
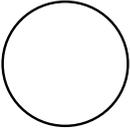
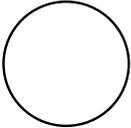
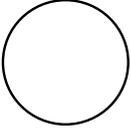
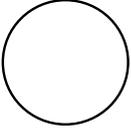
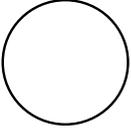
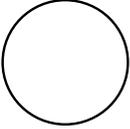
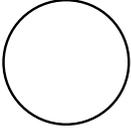
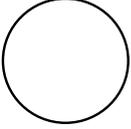
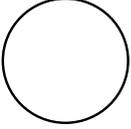
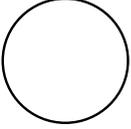
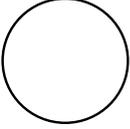
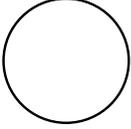
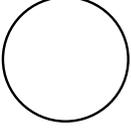
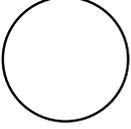
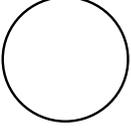
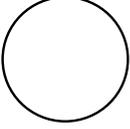
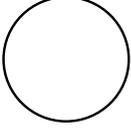
	
	

Worksheet 24

Colour or shade more shapes to count on to the given numbers.

18

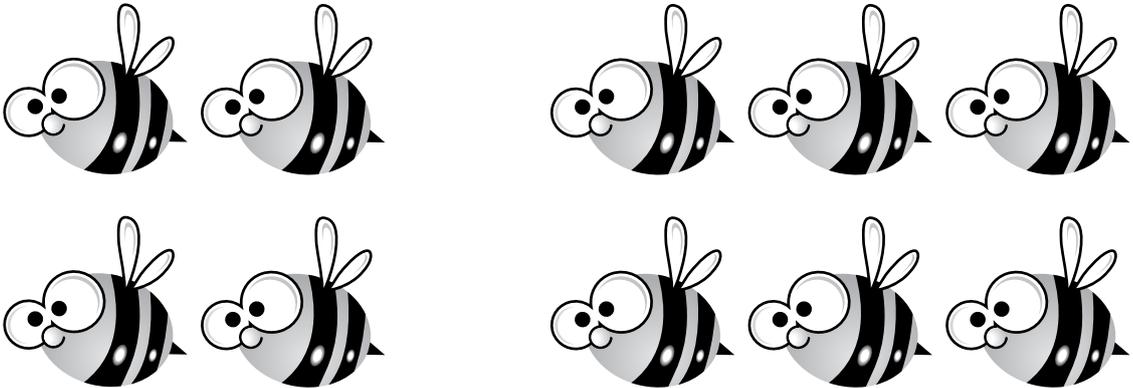
15

Worksheet 25

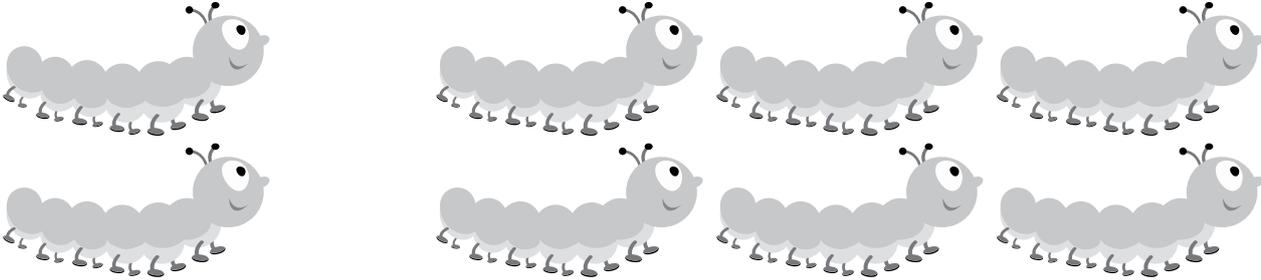
Count on to find the total number.



Two groups of ladybugs. The first group has 4 ladybugs (2 in the top row, 2 in the bottom row). The second group has 7 ladybugs (3 in the top row, 4 in the bottom row).



Two groups of bees. The first group has 4 bees (2 in the top row, 2 in the bottom row). The second group has 6 bees (3 in the top row, 3 in the bottom row).



Two groups of caterpillars. The first group has 2 caterpillars (1 in the top row, 1 in the bottom row). The second group has 6 caterpillars (3 in the top row, 3 in the bottom row).

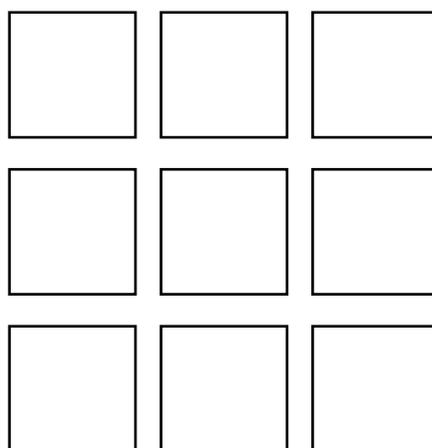
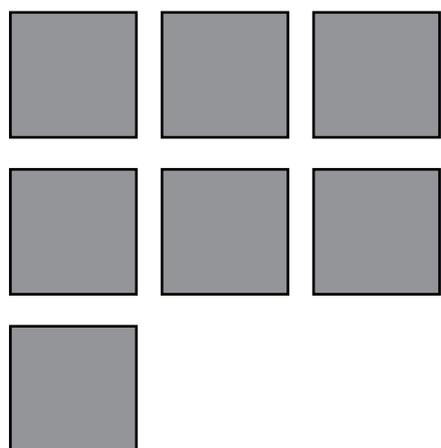
Worksheet 26

Draw more to make a total of 18 in each set.

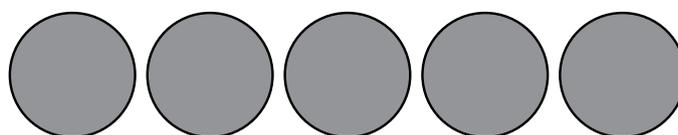
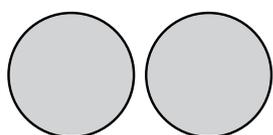
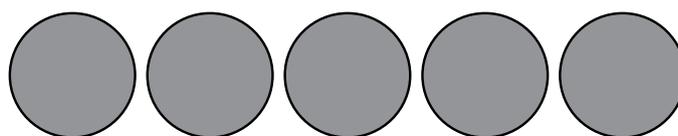
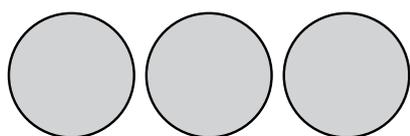
 <p>A 4x2 grid of 8 gift boxes. Each box is grey with a white vertical stripe and a white ribbon tied in a bow on top.</p>	<div style="border: 1px solid black; width: 100px; height: 60px; display: flex; align-items: center; justify-content: center;">18</div>
 <p>A 4x3 grid of 14 butterflies. The first three rows have 3 butterflies each, and the fourth row has 2 butterflies. All butterflies are grey.</p>	<div style="border: 1px solid black; width: 100px; height: 60px; display: flex; align-items: center; justify-content: center;">18</div>

Worksheet 27

How many altogether?



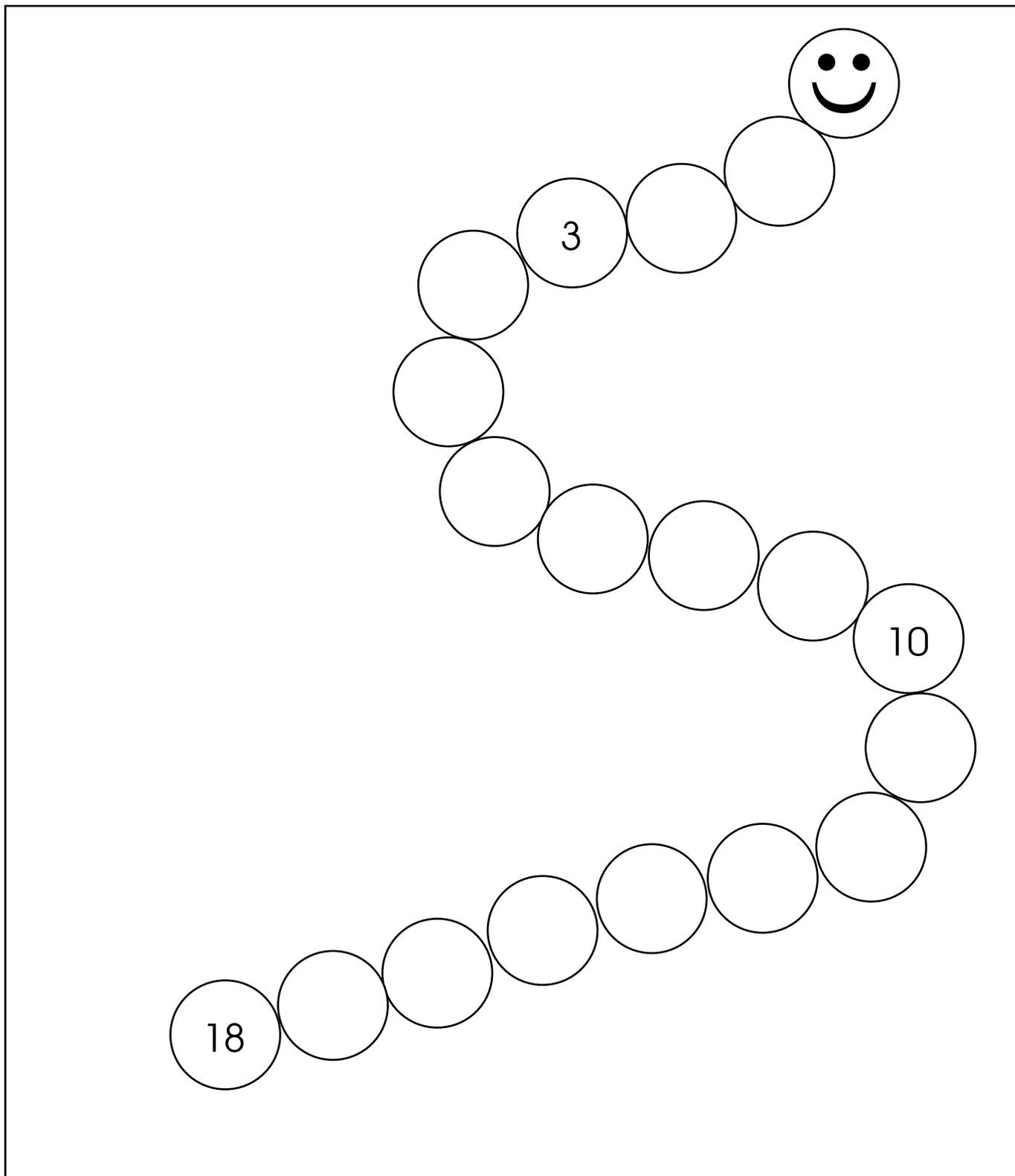
squares altogether.



circles altogether.

Worksheet 28

Fill in the missing numbers.



Worksheet 29

Draw more to make the given number.



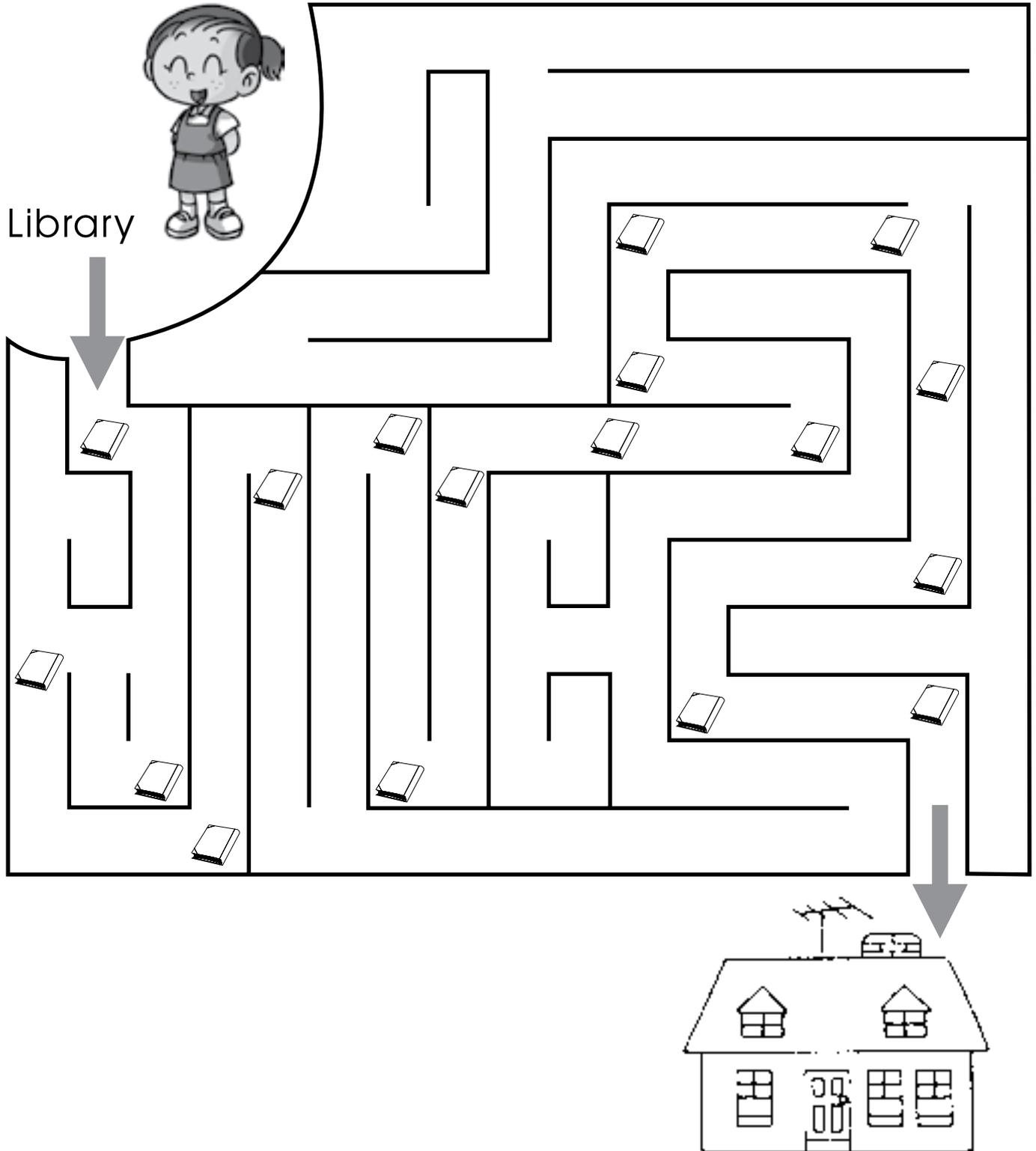
16



12

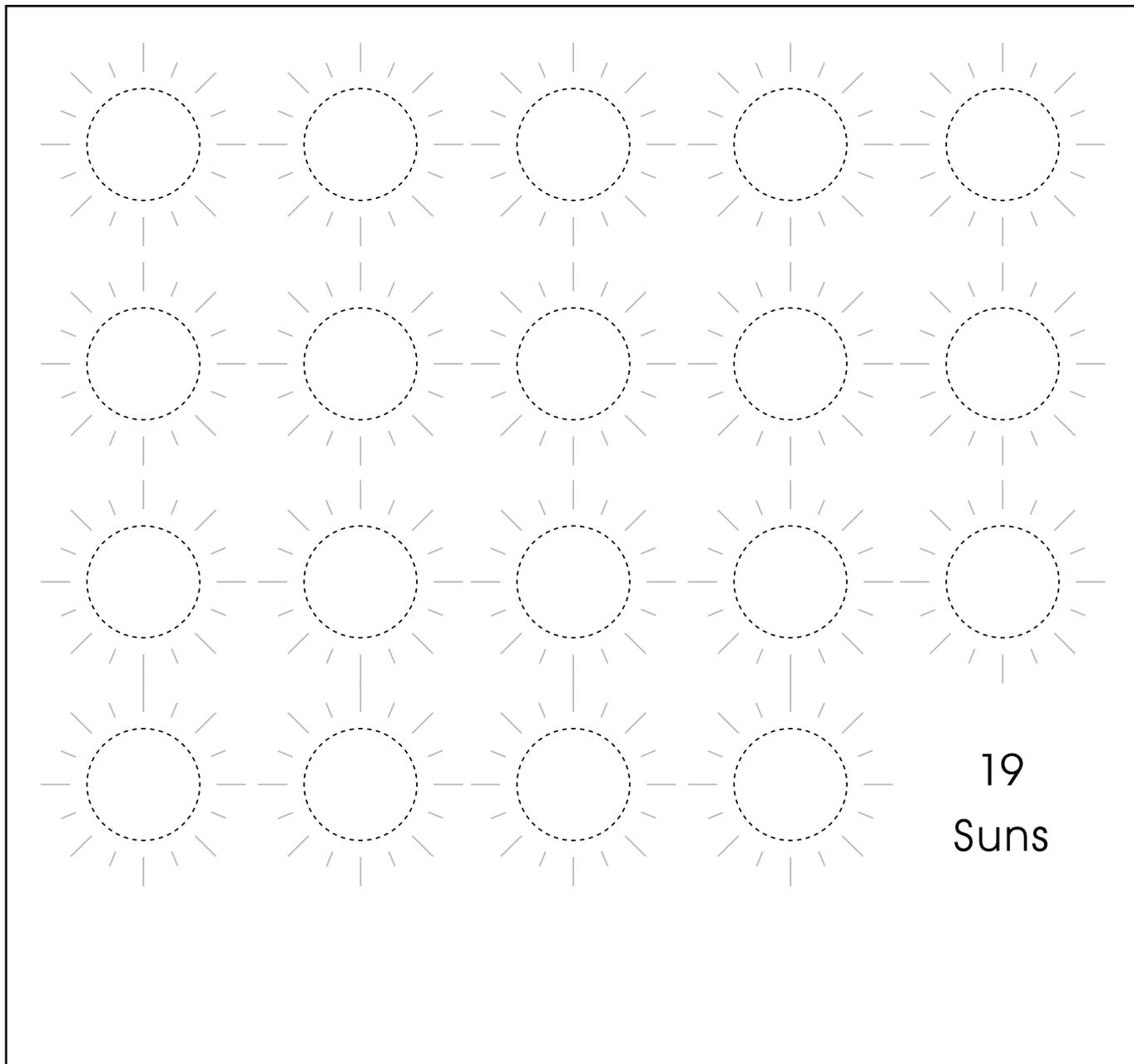
Worksheet 30

Trace the path for Sidra to pick up her 17 book and reach her house.

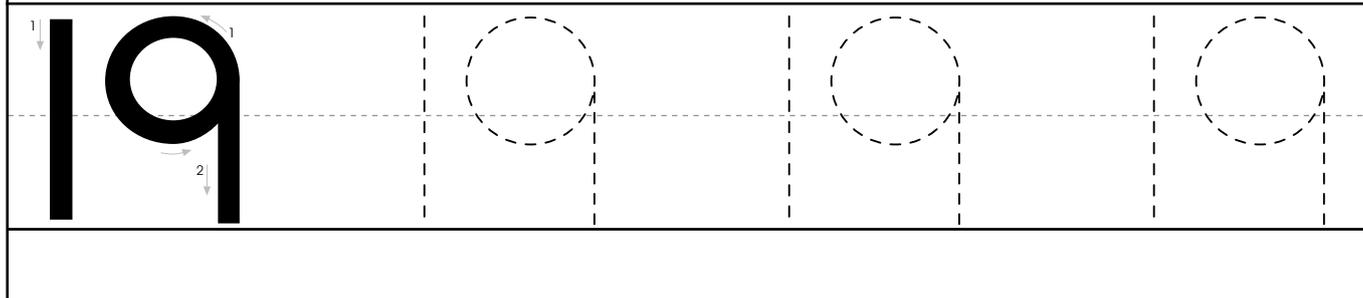


Worksheet 31

Trace the 19 Suns. Trace the number.

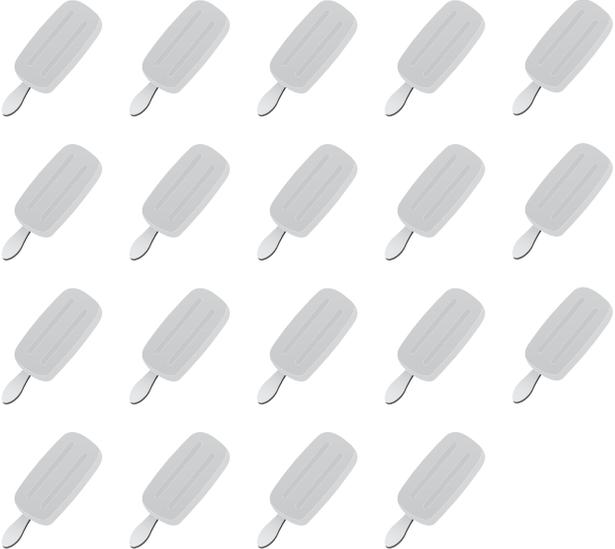
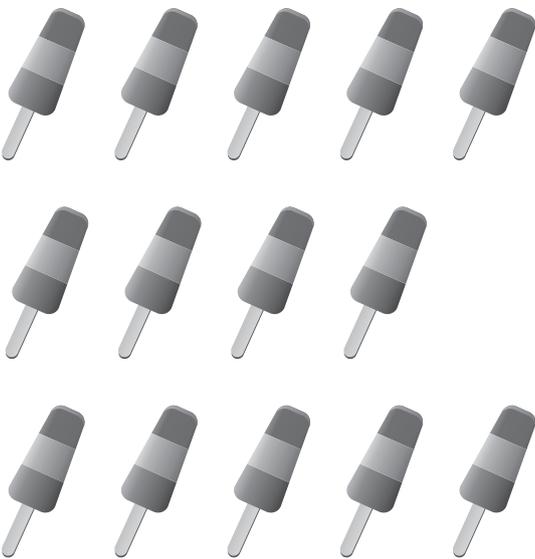


19
Suns



Worksheet 32

Count the objects and write the number. Next, draw at least 10 of the same items in the box on the right.

 <input type="text"/>	
 <input type="text"/>	

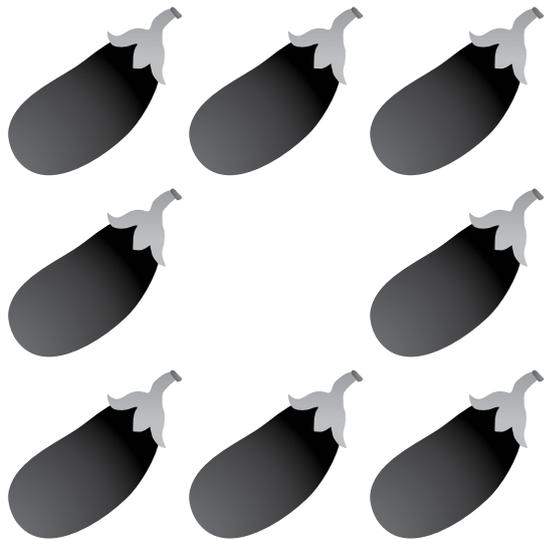
Worksheet 33

Draw a ladder with 19 steps for Nadir to climb up to his tree house.



Worksheet 34

Draw the required number of aubergines.



eight

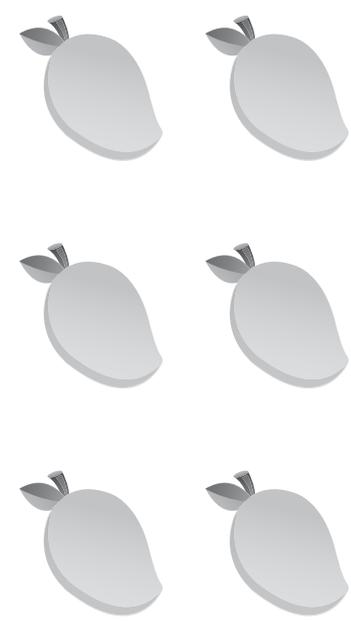
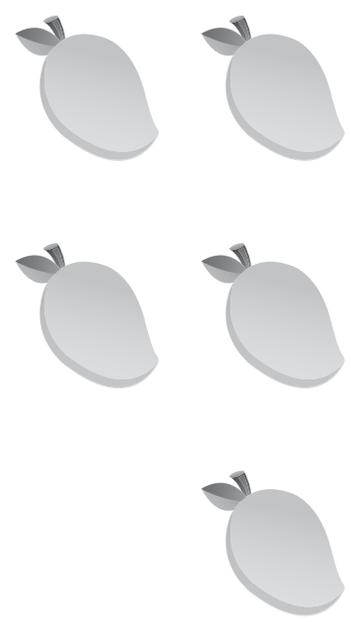
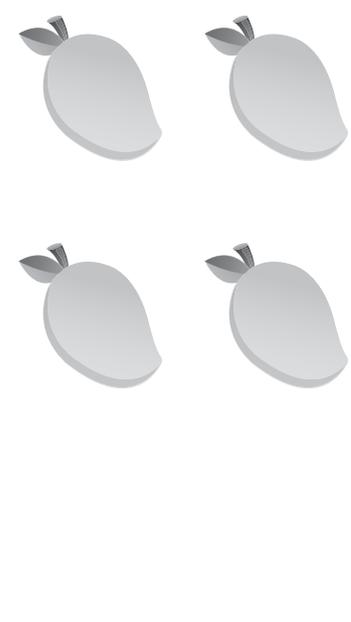
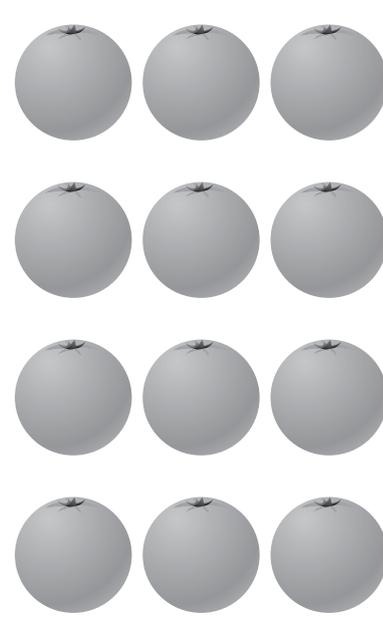
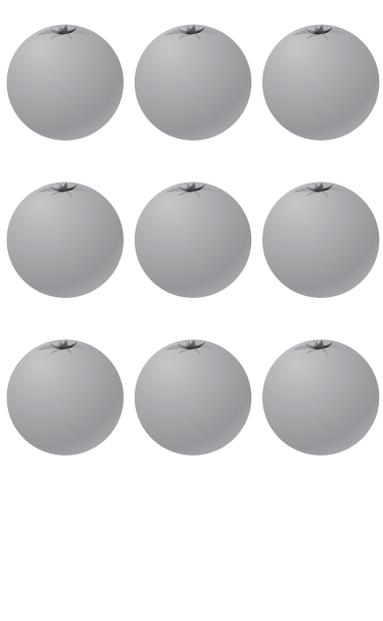
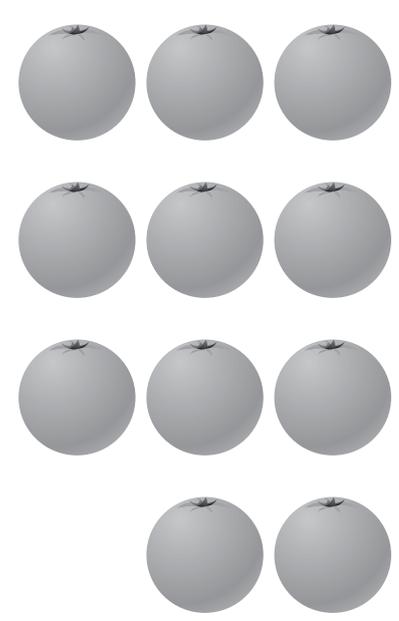
thirteen

seventeen

twenty

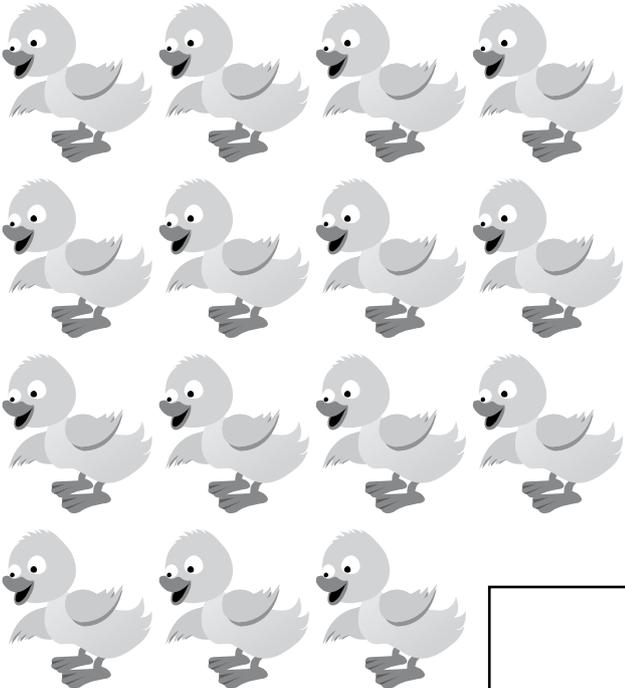
Worksheet 35

In each row, circle the set with 1 fewer object than the set on the left.

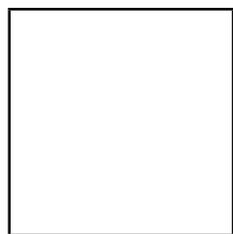
Worksheet 36

Count the objects in the set on the left. Next, draw a set with 1 more object on the right.

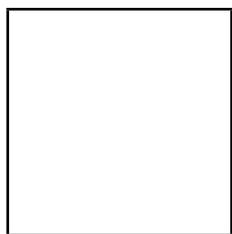
 <input type="text"/>	<input type="text"/>
 <input type="text"/>	<input type="text"/>

Worksheet 37

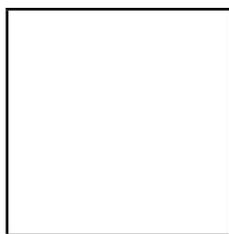
Colour the square above every second number.



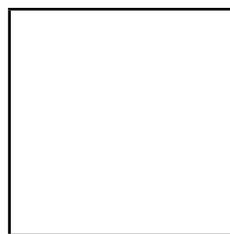
1



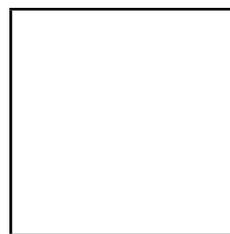
2



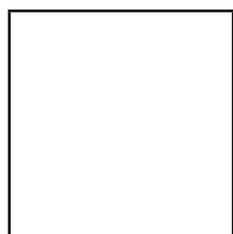
3



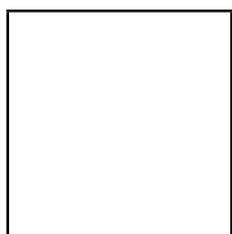
4



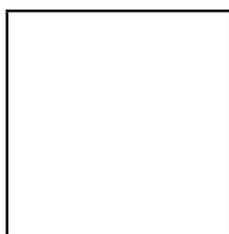
5



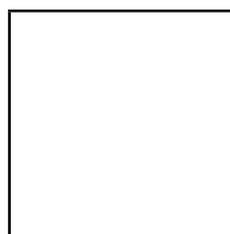
6



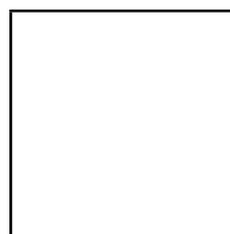
7



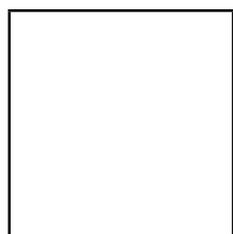
8



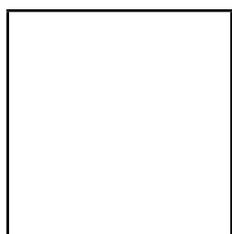
9



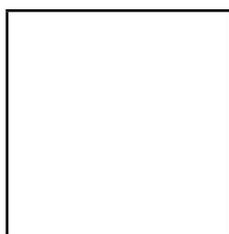
10



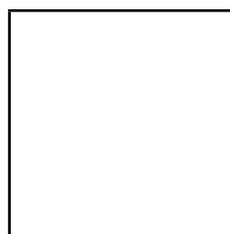
11



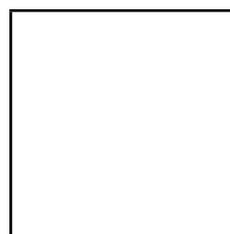
12



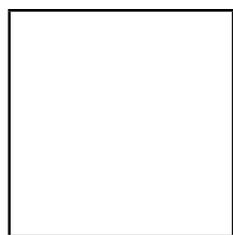
13



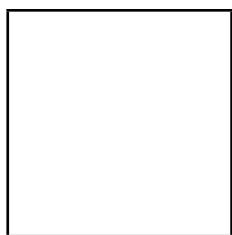
14



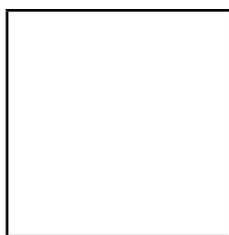
15



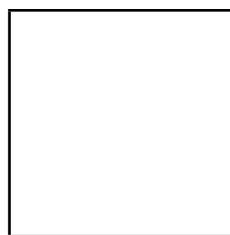
16



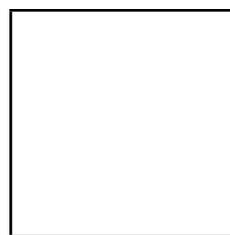
17



18



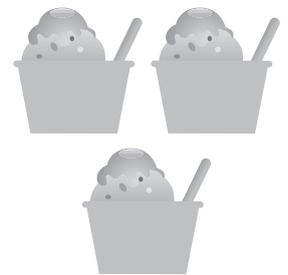
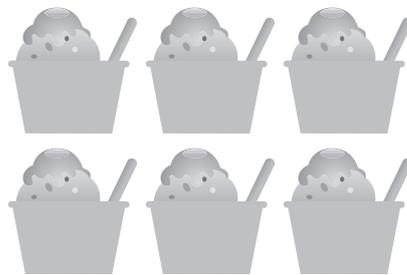
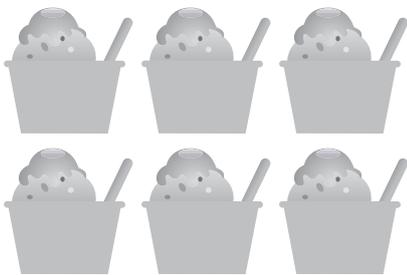
19



20

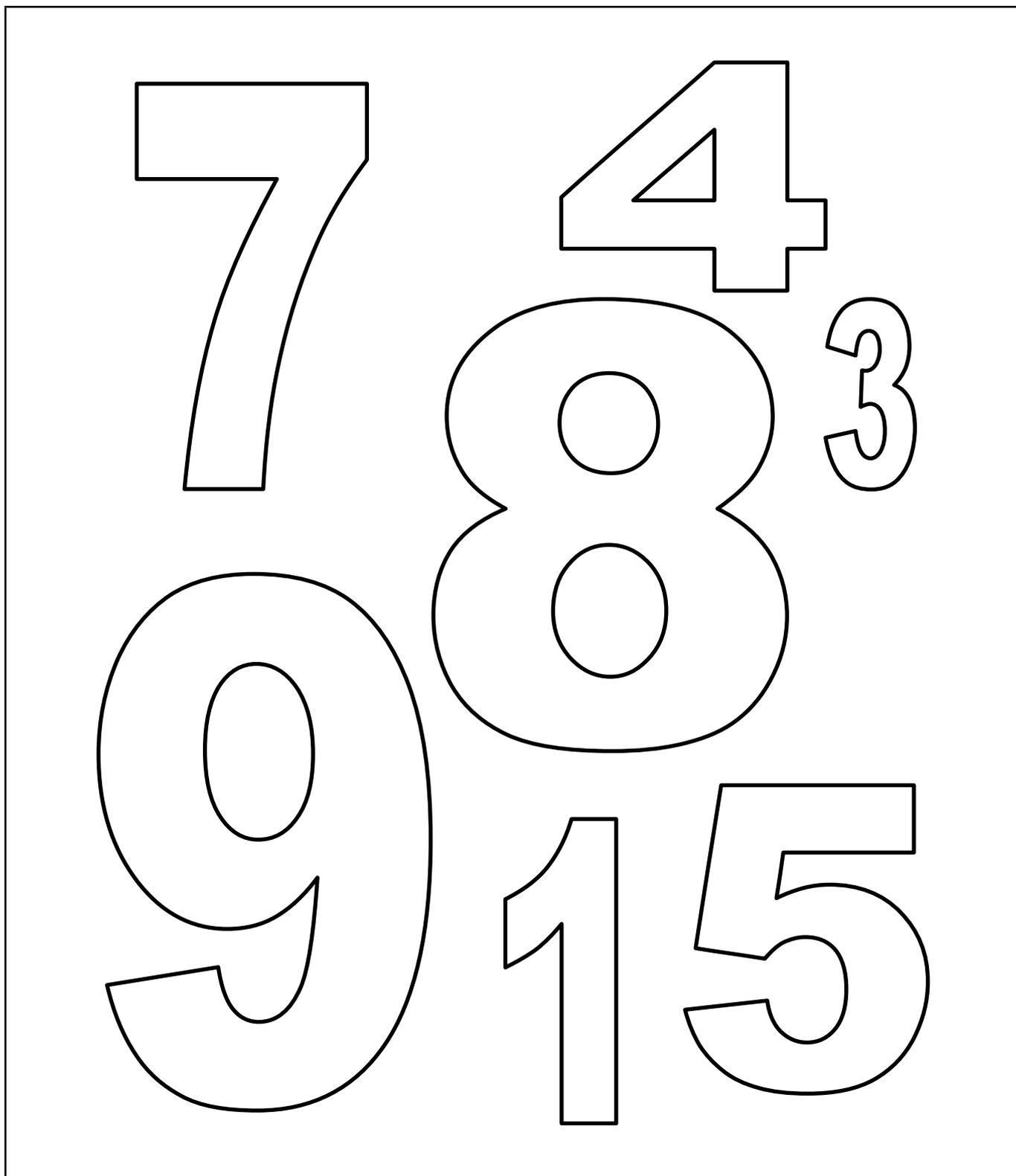
Worksheet 38

Circle each set in groups of 3.



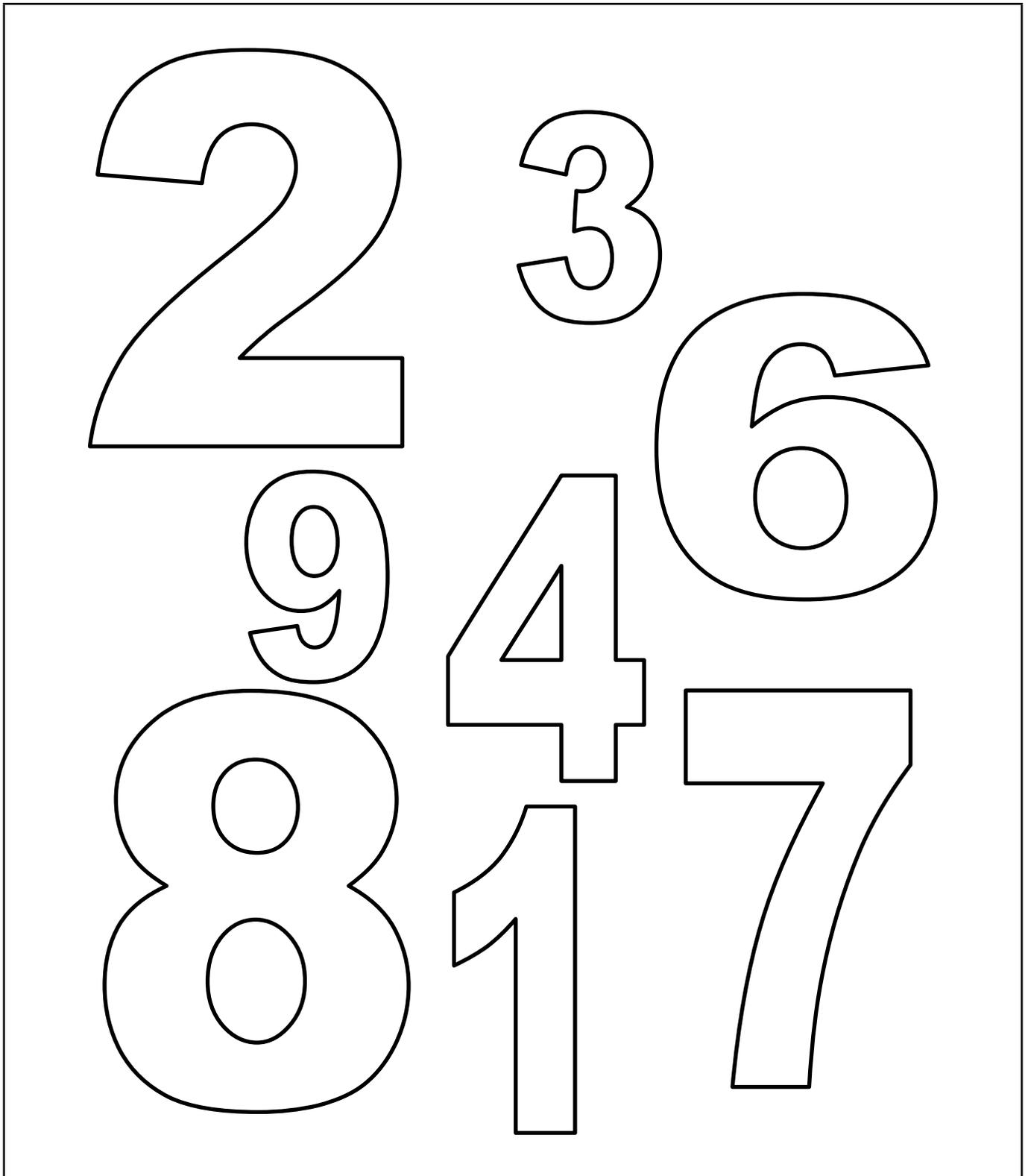
Worksheet 39

Colour all the odd numbers.



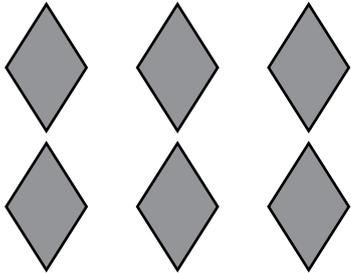
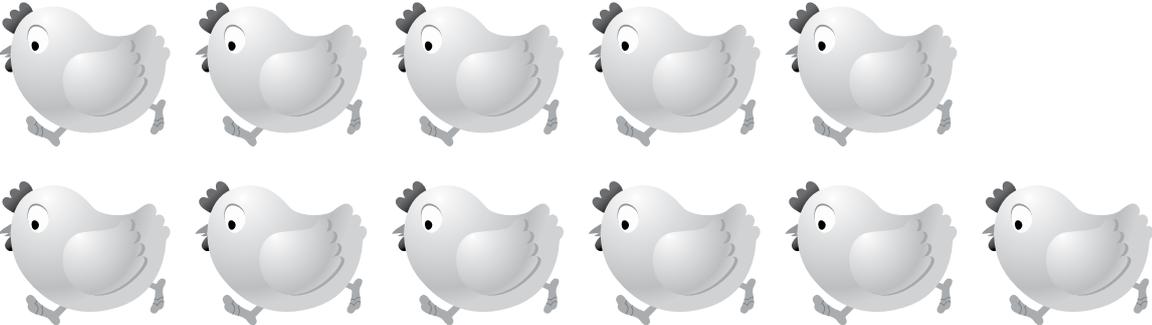
Worksheet 40

Colour all the even numbers.



Worksheet 41

Count the objects in each set and tick (✓) the set with an odd number.

 <input type="checkbox"/>	 <input type="checkbox"/>
 <input type="checkbox"/>	
 <input type="checkbox"/>	

Worksheet 42

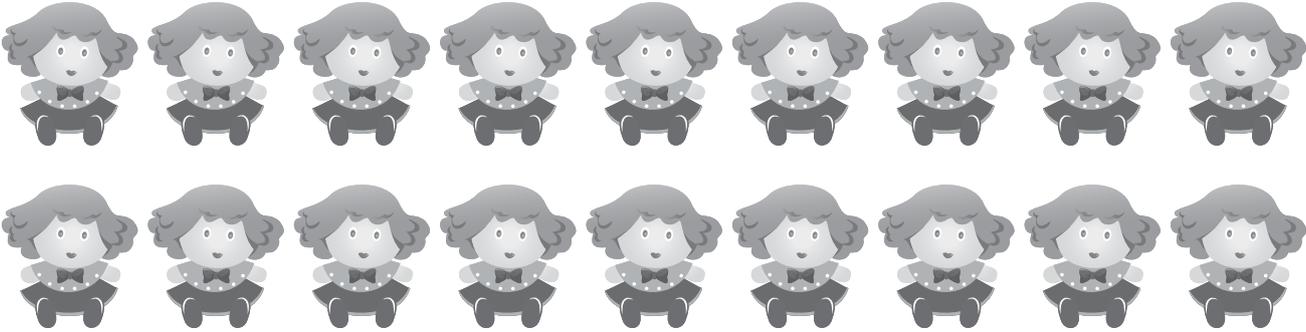
Count the objects in each set and write if the number is odd or even.



_____ is an _____ number



_____ is an _____ number



_____ is an _____ number

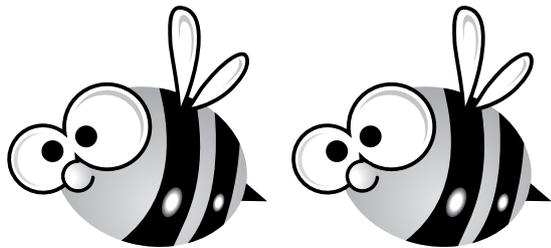
Worksheet 43

Look at the number and circle the correct word.

<p>10</p> <p>odd</p> <p>even</p>	<p>7</p> <p>odd</p> <p>even</p>
<p>13</p> <p>odd</p> <p>even</p>	<p>15</p> <p>odd</p> <p>even</p>
<p>8</p> <p>odd</p> <p>even</p>	<p>20</p> <p>odd</p> <p>even</p>

Worksheet 44

Count and write the correct number.

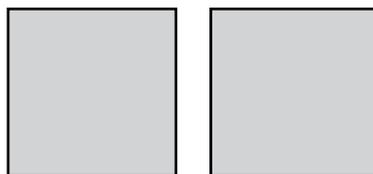


2



1

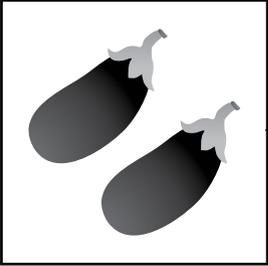
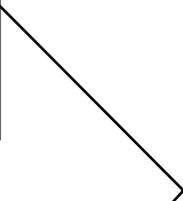
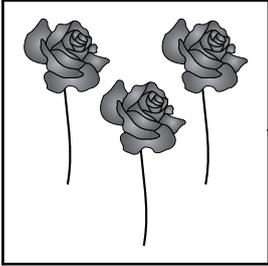
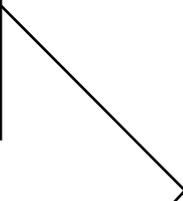
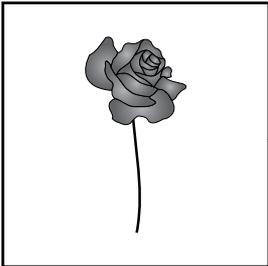
2 and 1 make _____



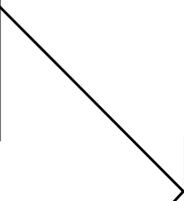
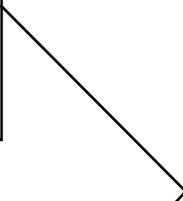
1 and 2 make _____

Worksheet 45

Write the number to make the total.

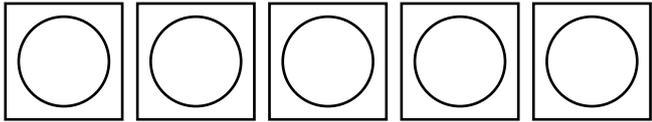
		<input type="text"/>
		
		<input type="text"/>
		

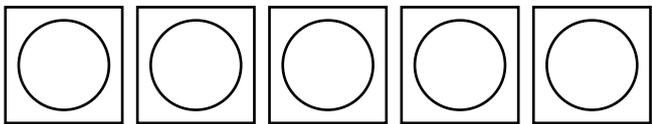
Draw the objects to make the total.

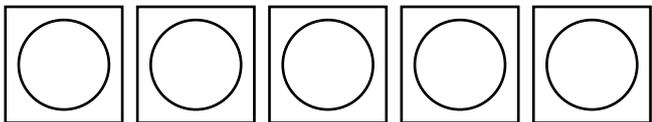
		<input type="text" value="4"/>
<input type="text"/>		
		<input type="text" value="4"/>
<input type="text"/>		

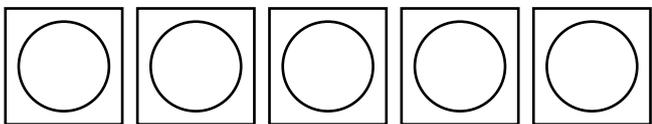
Worksheet 46

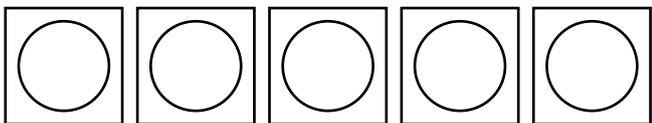
Write the correct numbers to make 5.

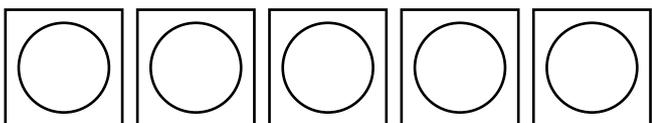
 0 and _____ make 5

 1 and _____ make 5

 2 and _____ make 5

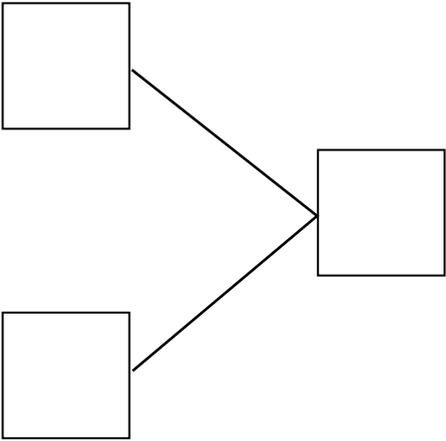
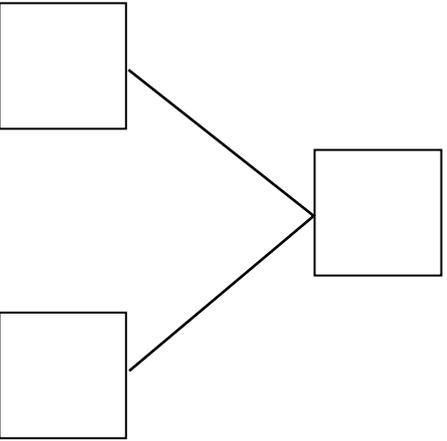
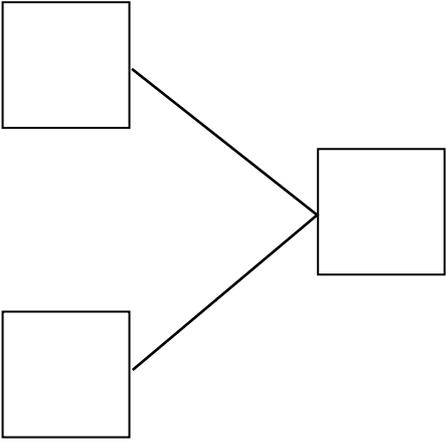
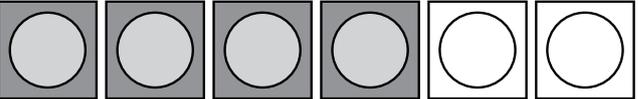
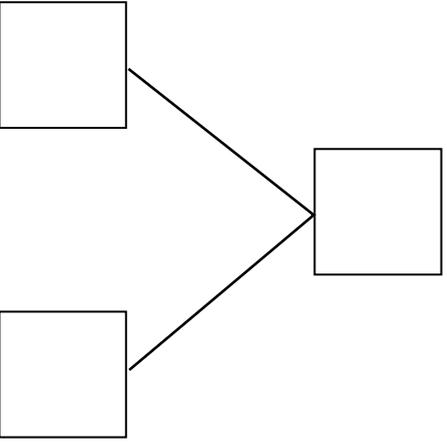
 3 and _____ make 5

 4 and _____ make 5

 5 and _____ make 5

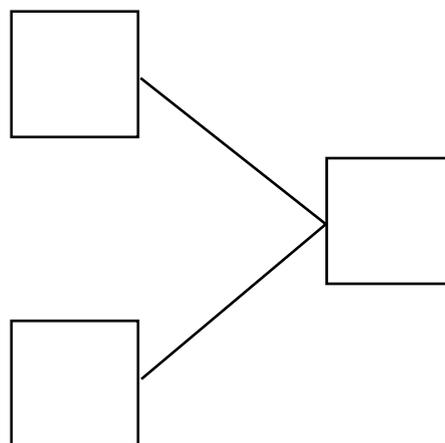
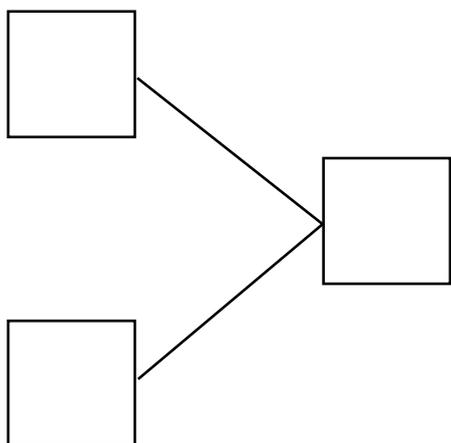
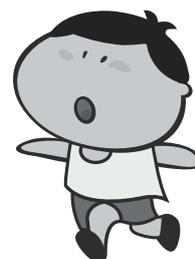
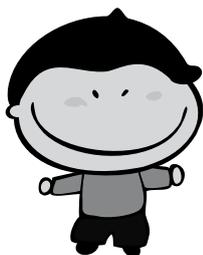
Worksheet 47

Count the shaded and unshaded squares to make number bonds of 6.

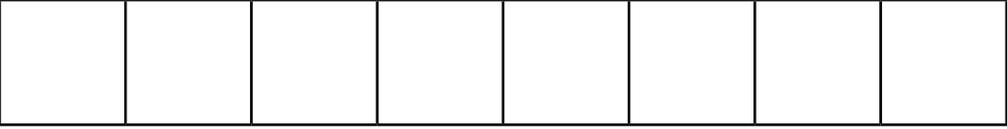
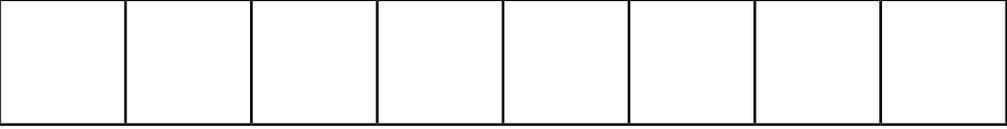
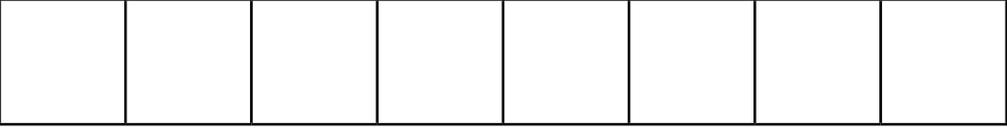
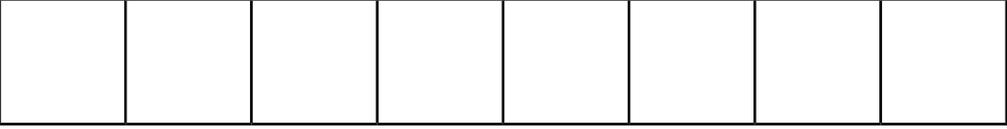
Worksheet 48

Sort the children in any way to make number bonds of 7.



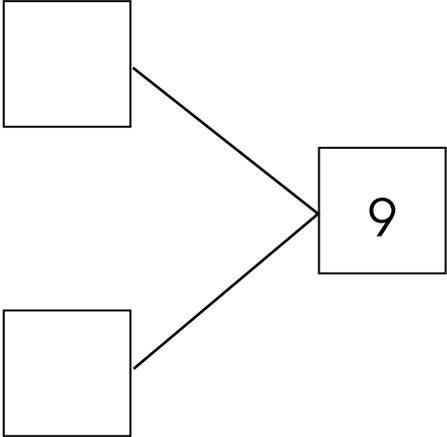
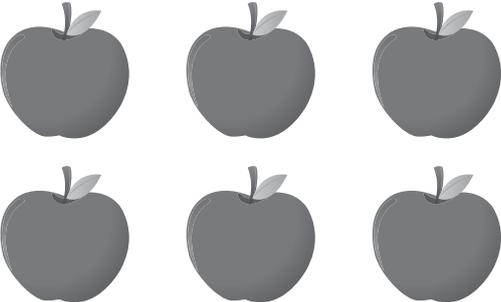
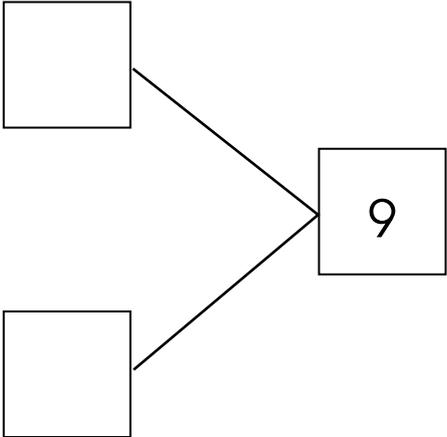
Worksheet 49

Paste the squares given in any way to make number bonds of 8.

	7 and 1
	8 and 0
	
	
	
	
	
	
	

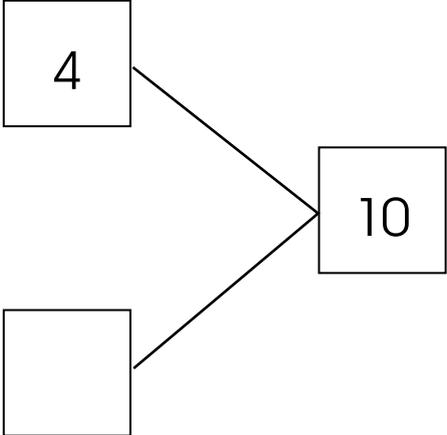
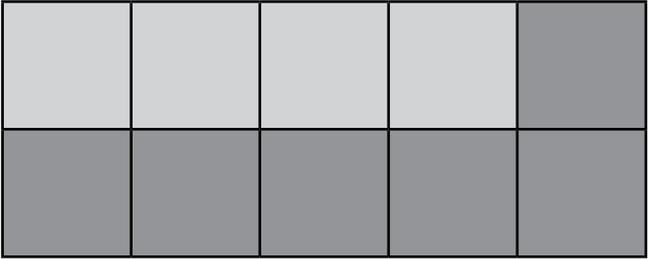
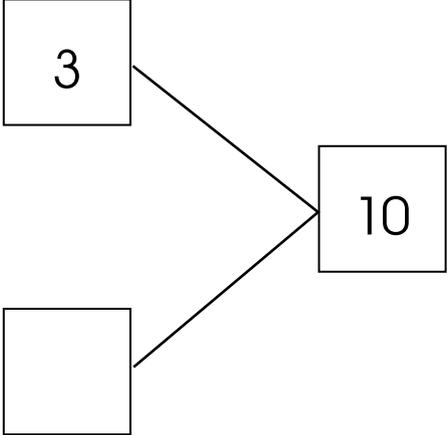
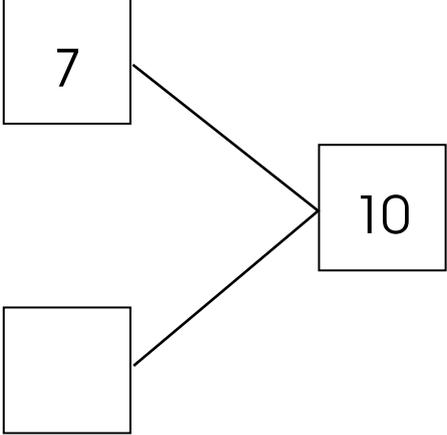
Worksheet 50

Count to make number bonds of 9.

	<input type="text"/>	
	<input type="text"/>	
	<input type="text"/>	
	<input type="text"/>	

Worksheet 51

Count the differently shaded squares to make number bonds of 10.

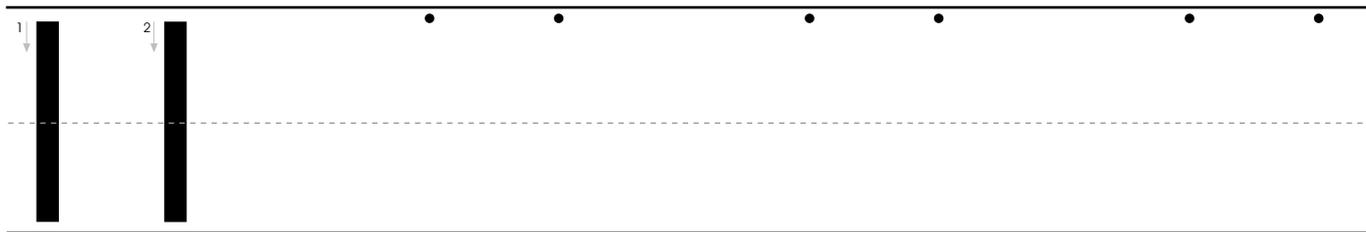
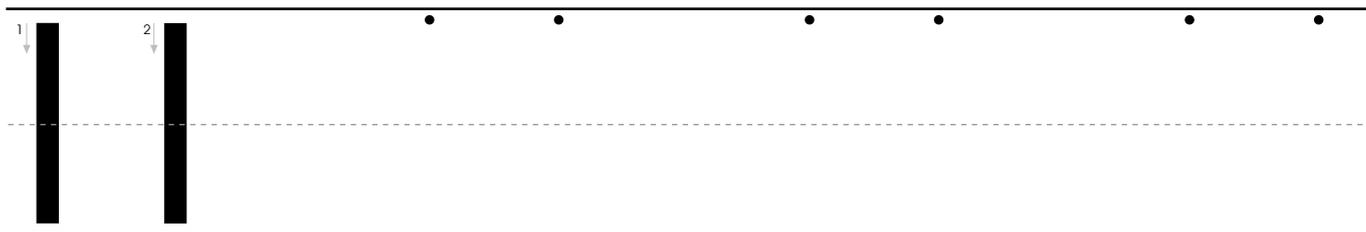
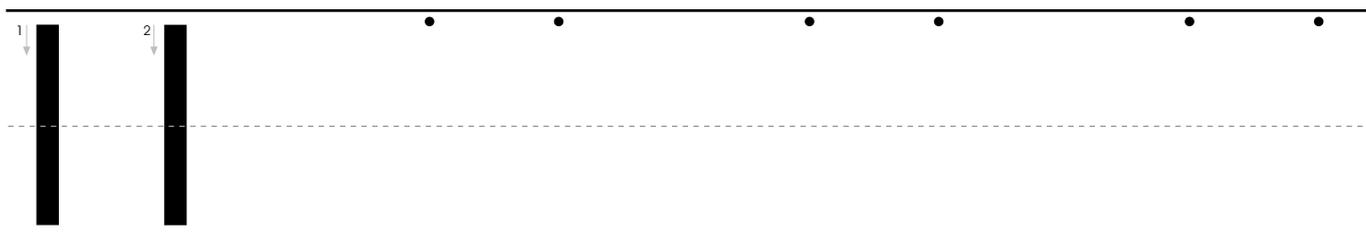
	
	
	

Worksheet 52

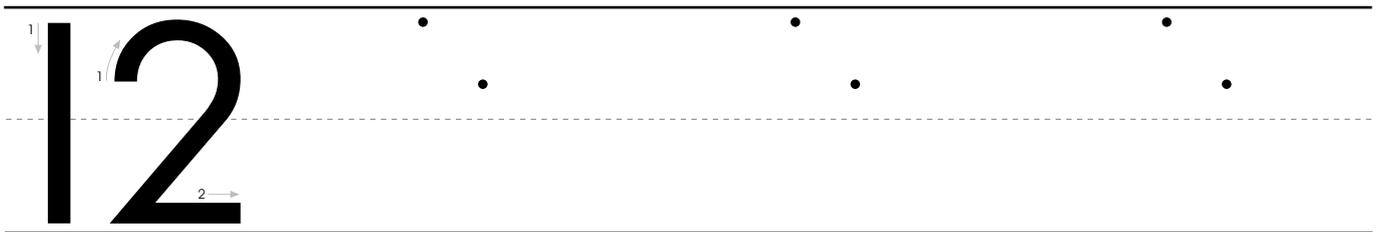
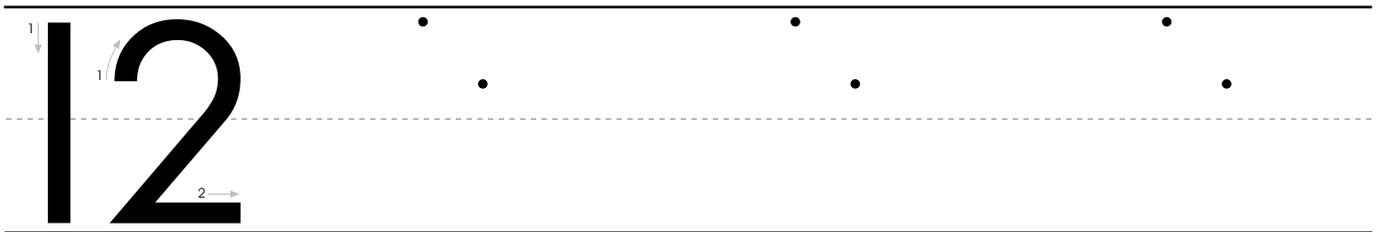
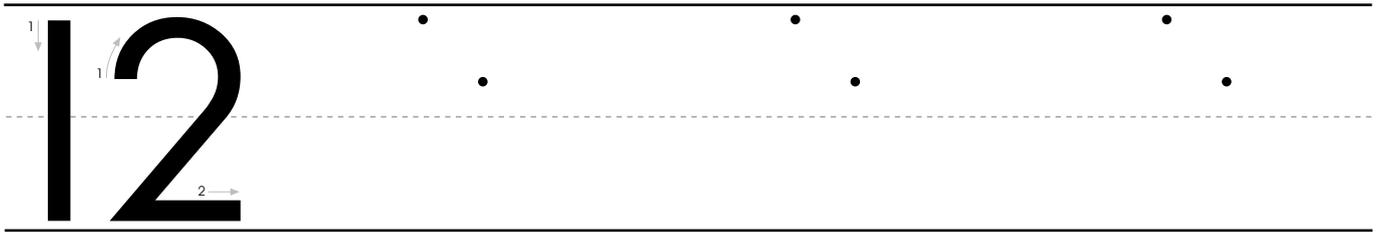
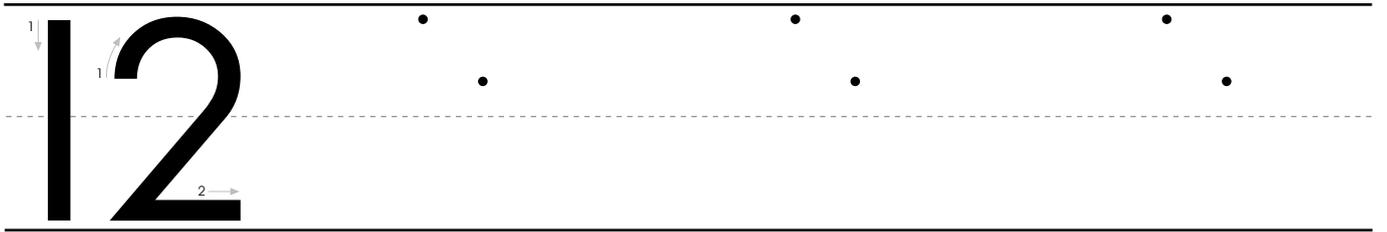
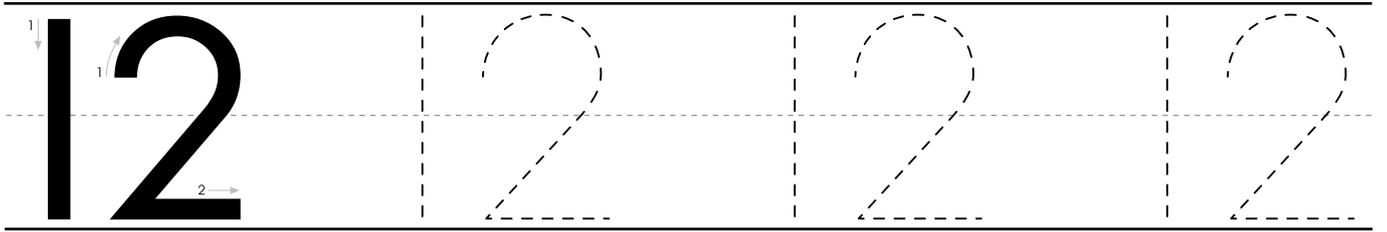
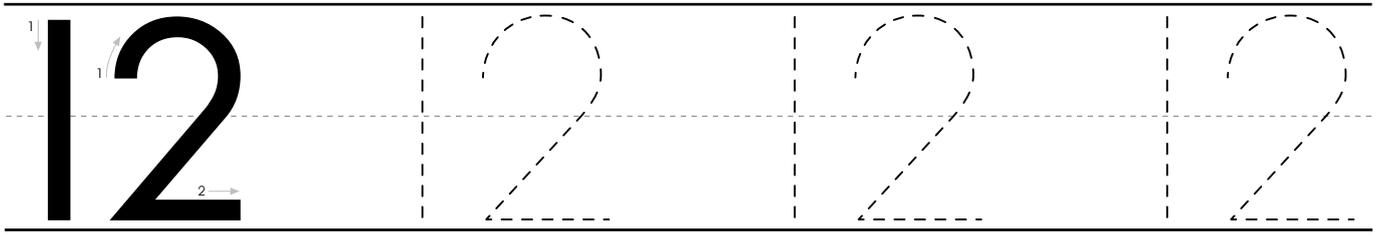
Colour the even numbers to find the correct path.

Start				
2	4	5	9	7
11	0	17	1	19
3	8	14	15	9
15	13	18	11	3
7	1	6	20	12
				Finish

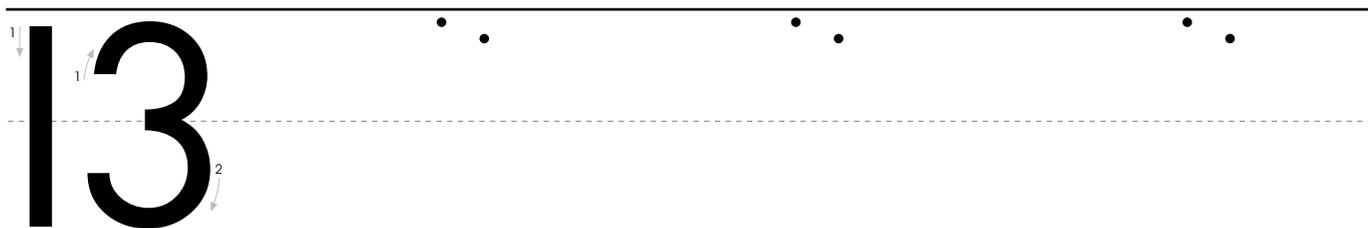
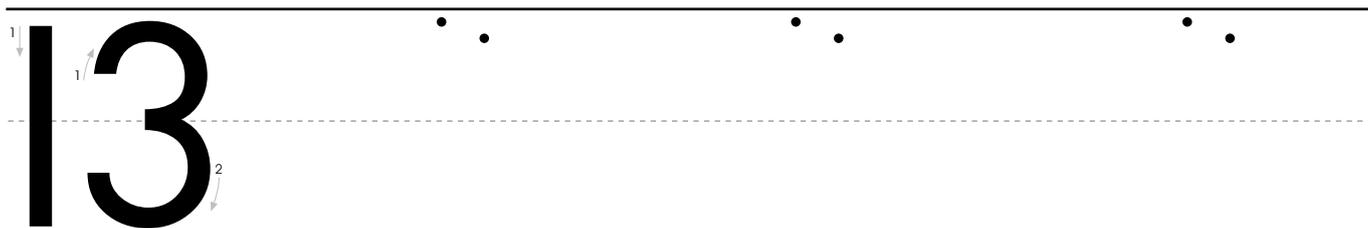
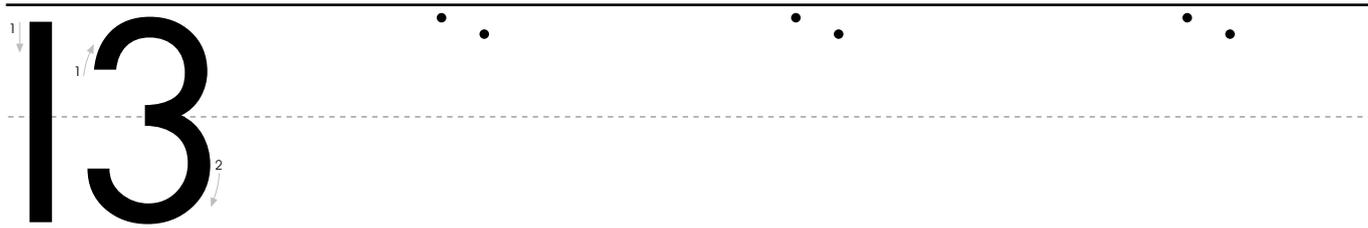
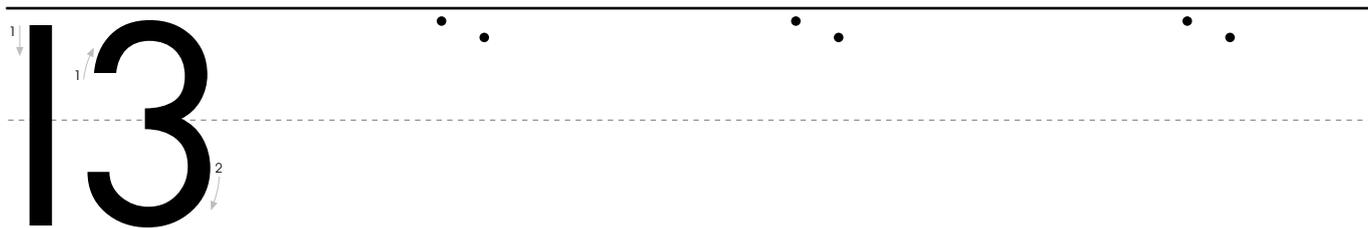
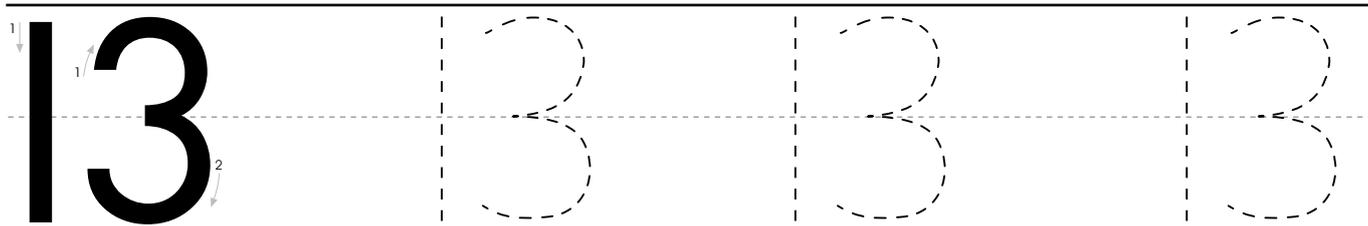
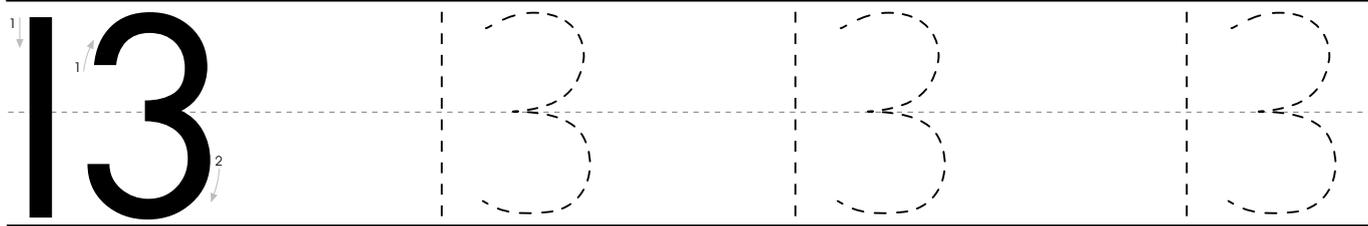
Writing practice



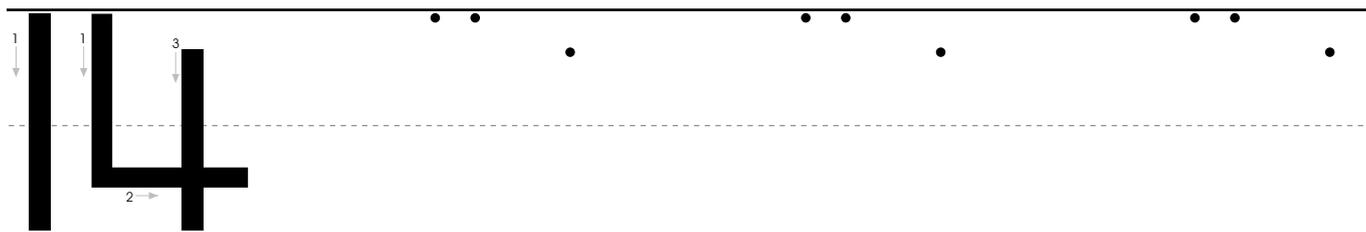
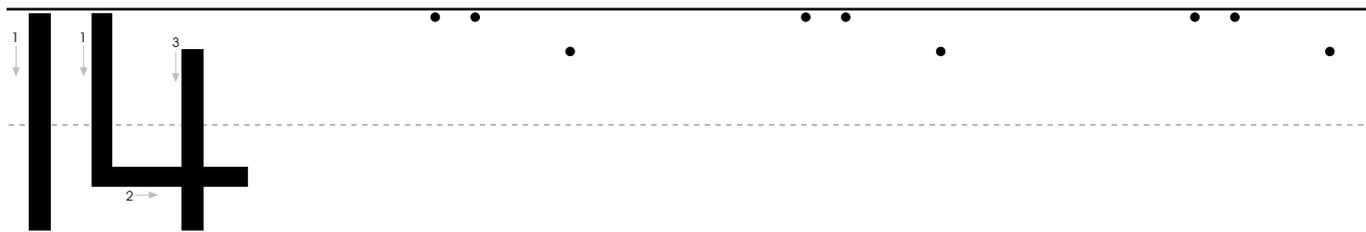
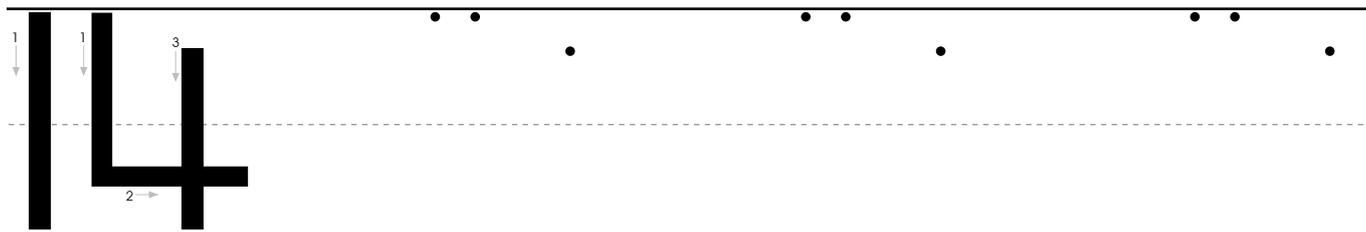
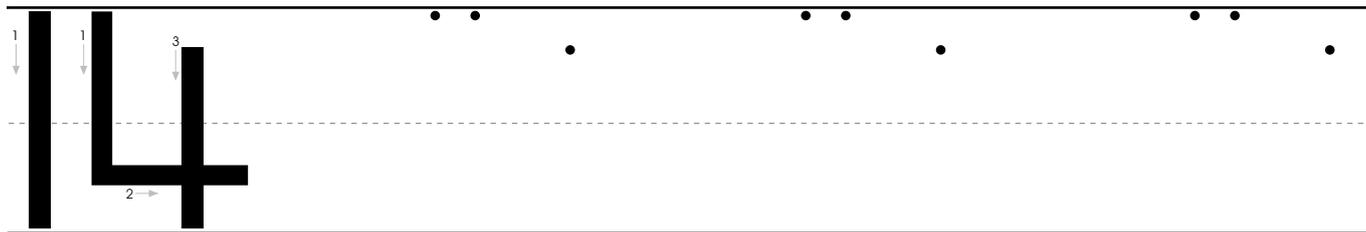
Writing practice



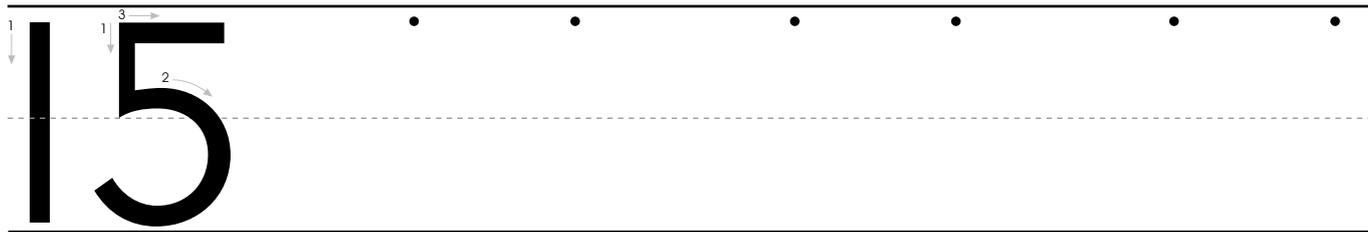
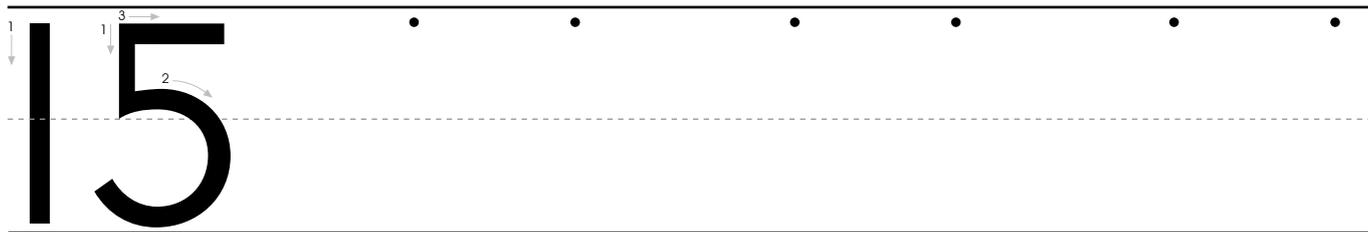
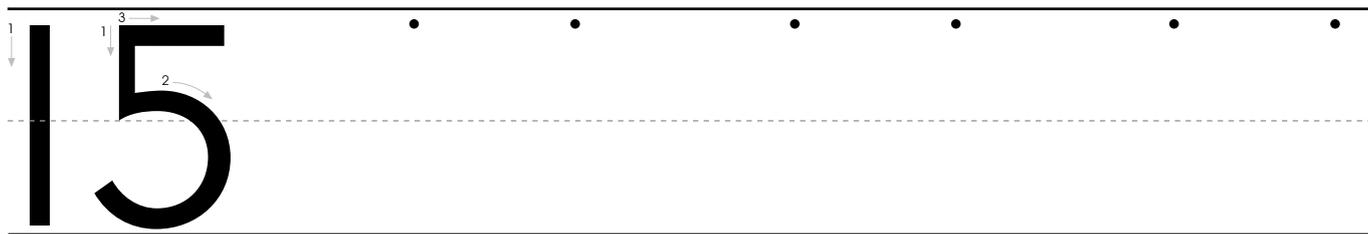
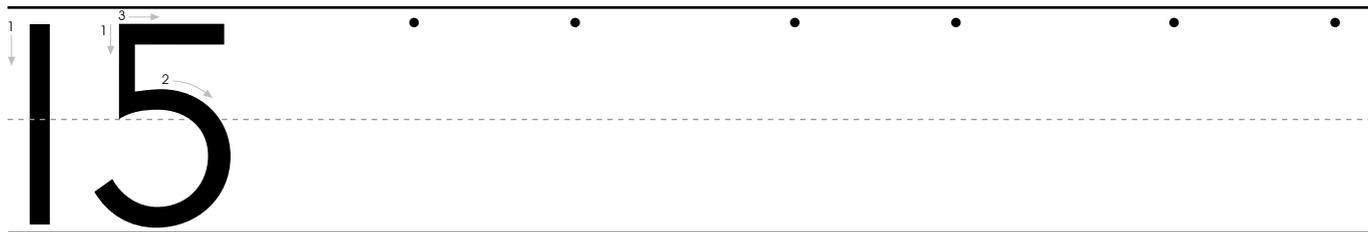
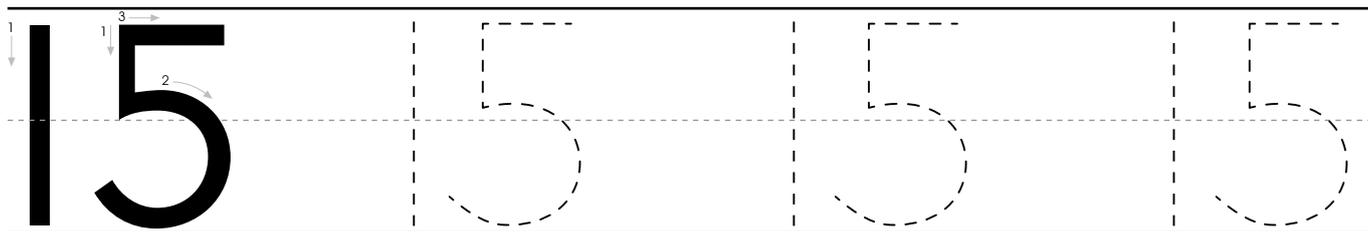
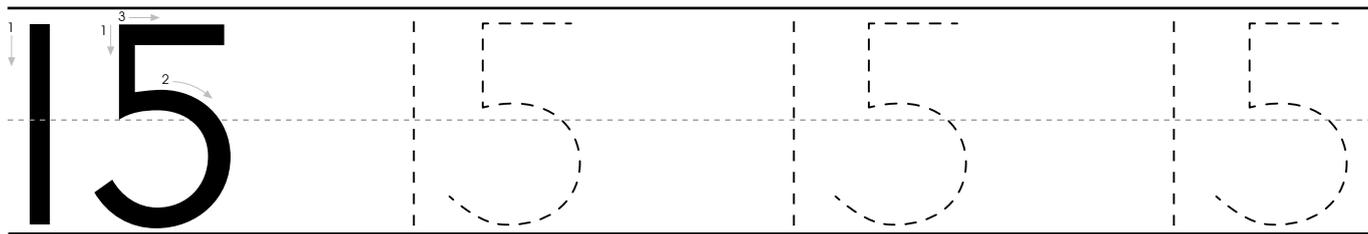
Writing practice



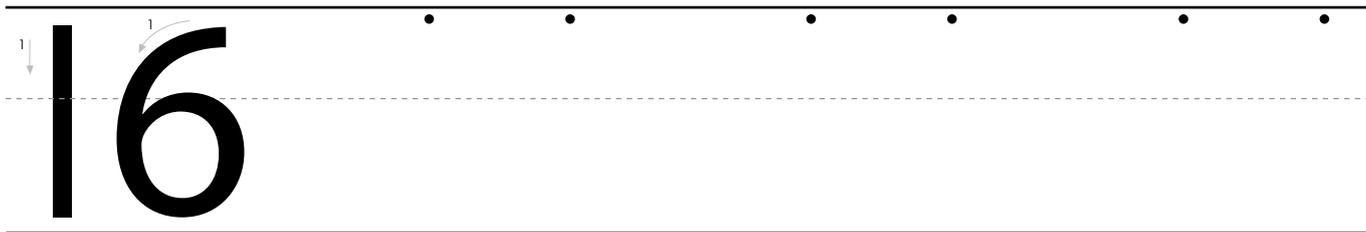
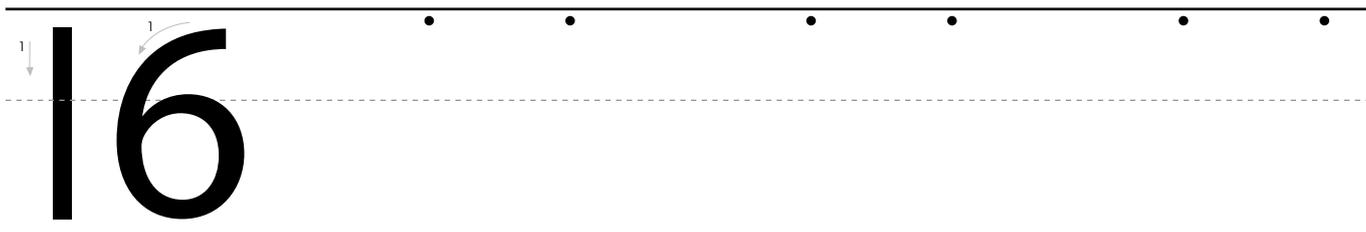
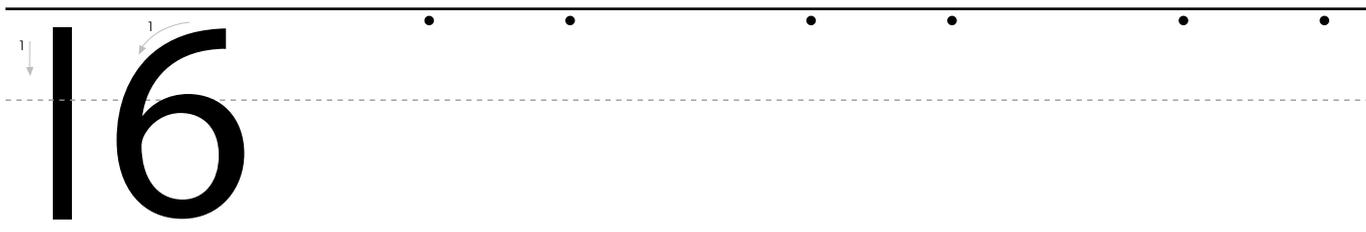
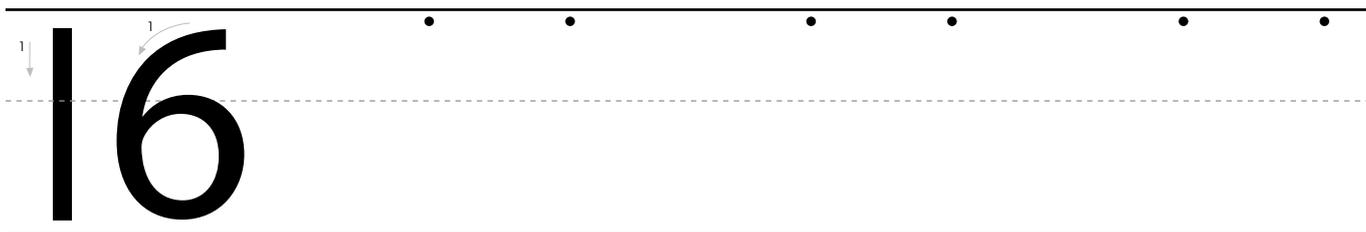
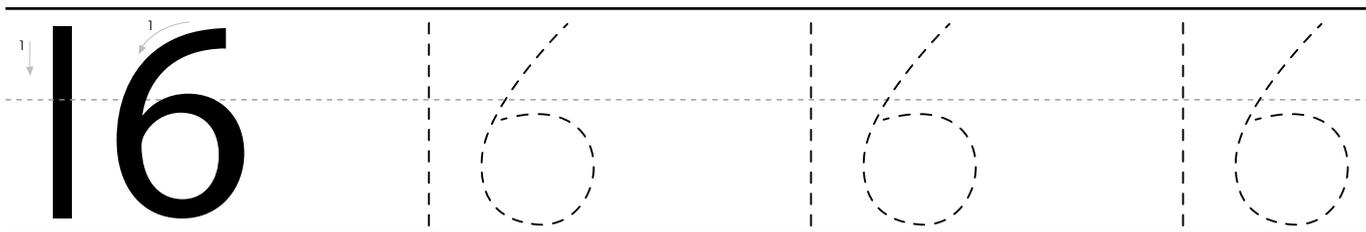
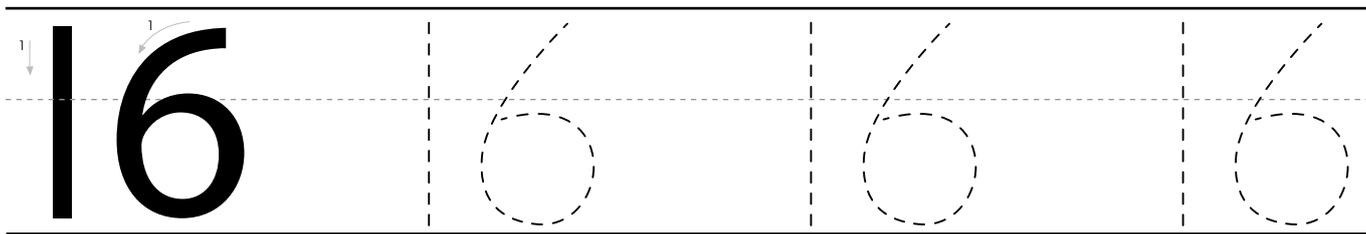
Writing practice



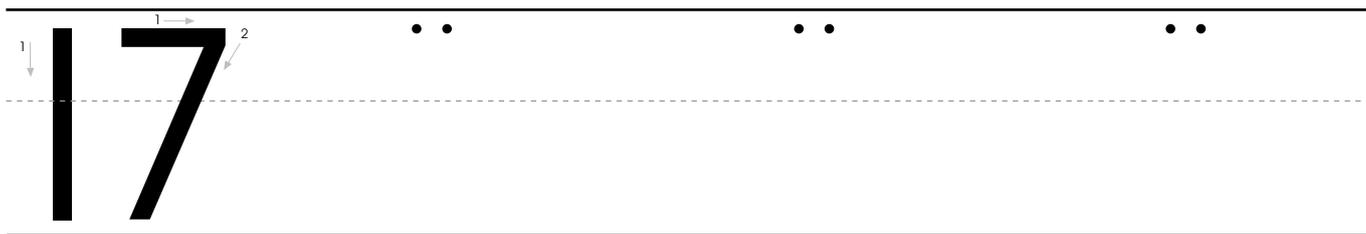
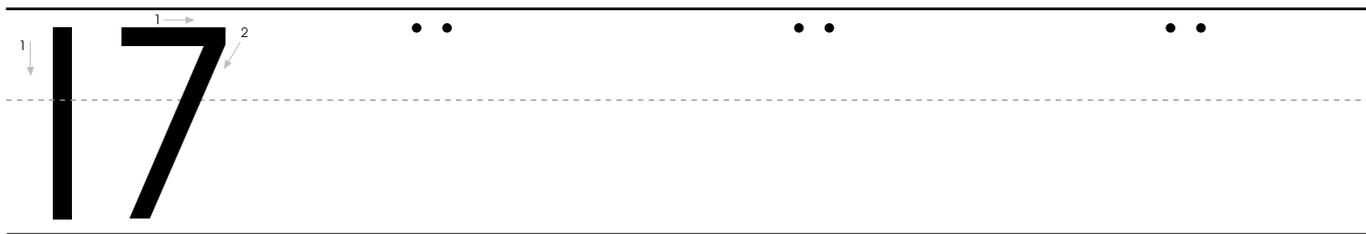
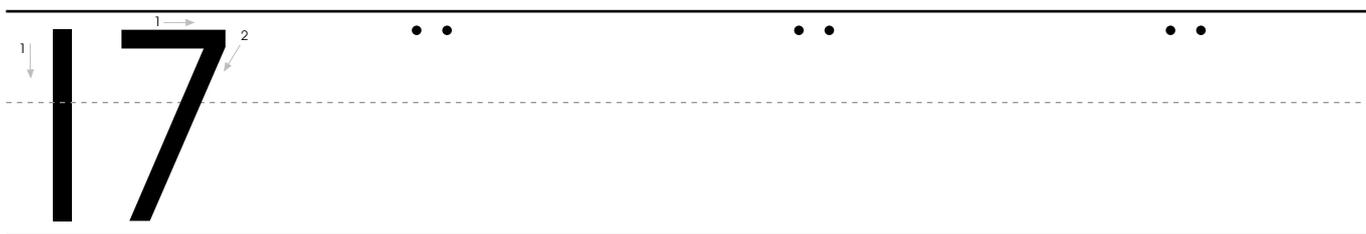
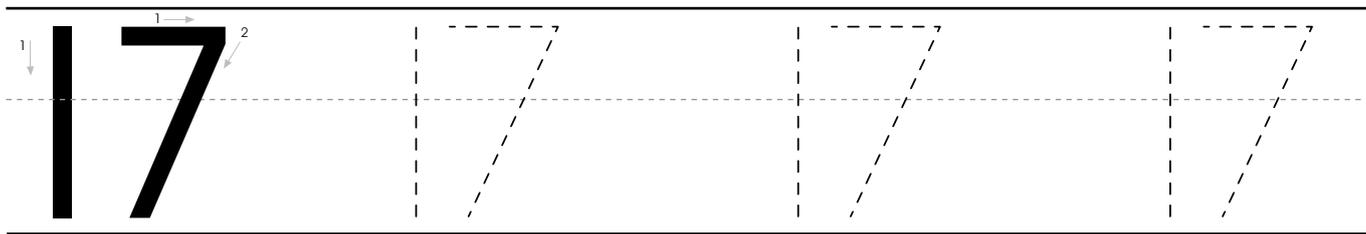
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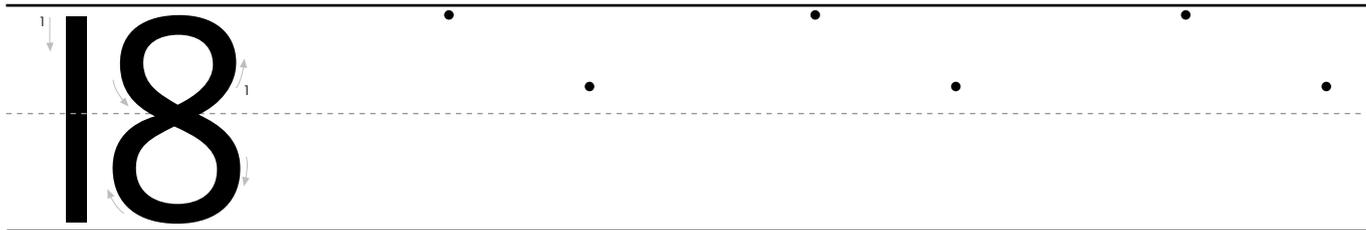
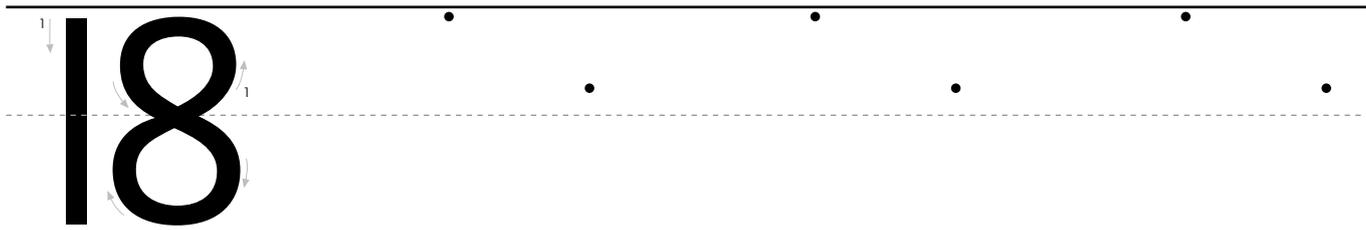
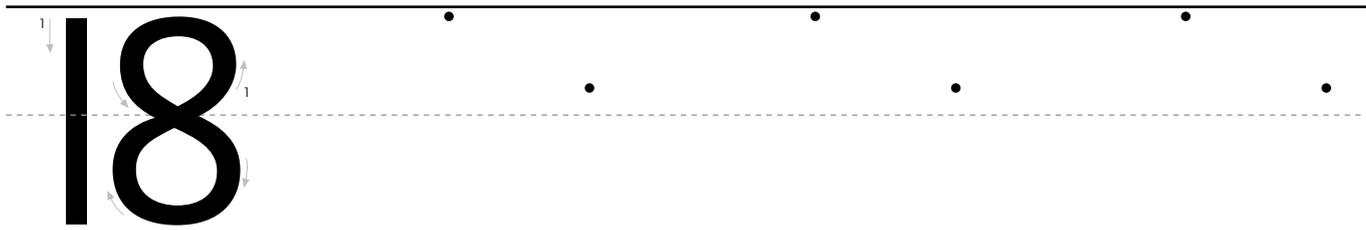
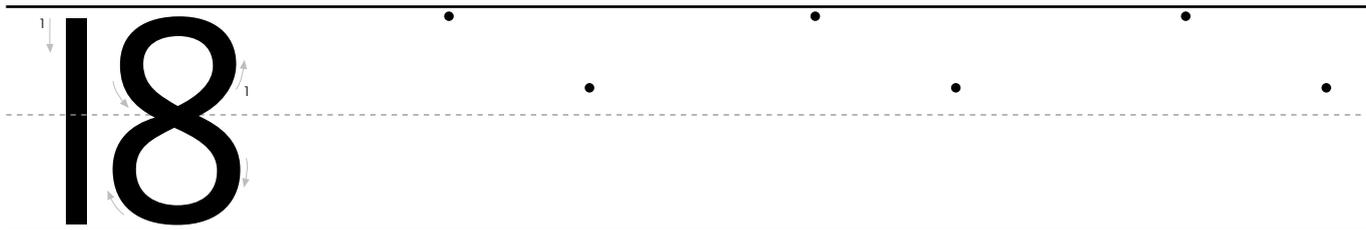
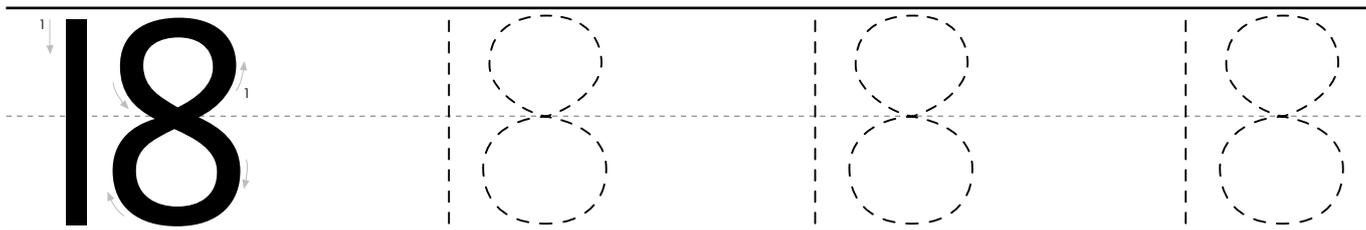
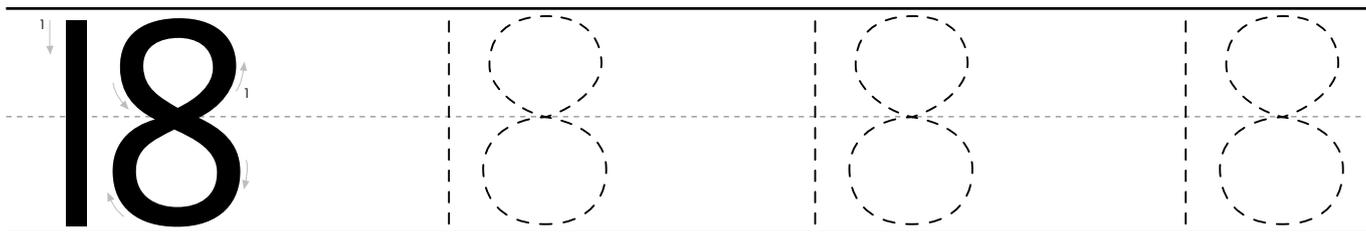
Writing practice



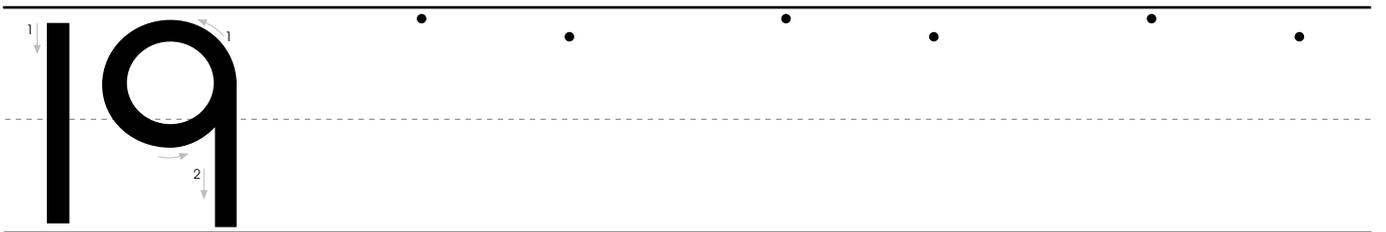
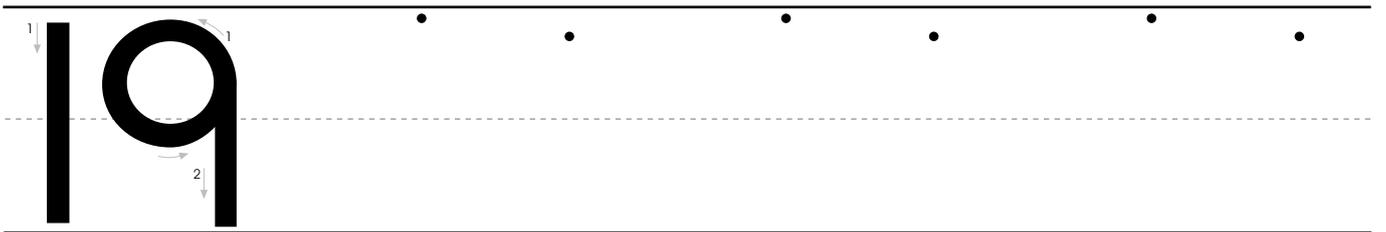
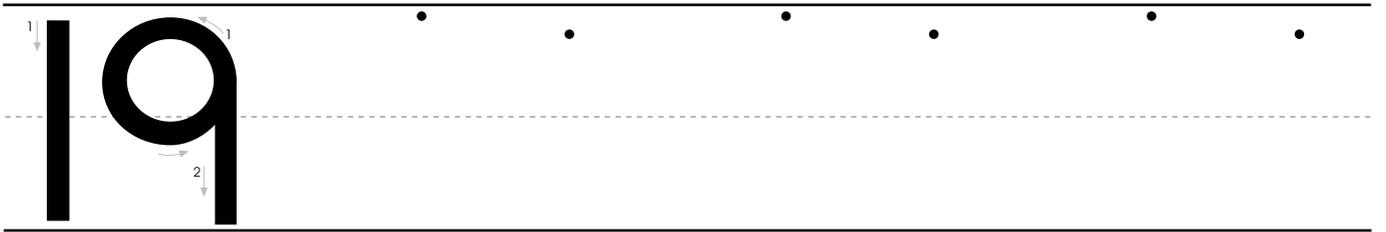
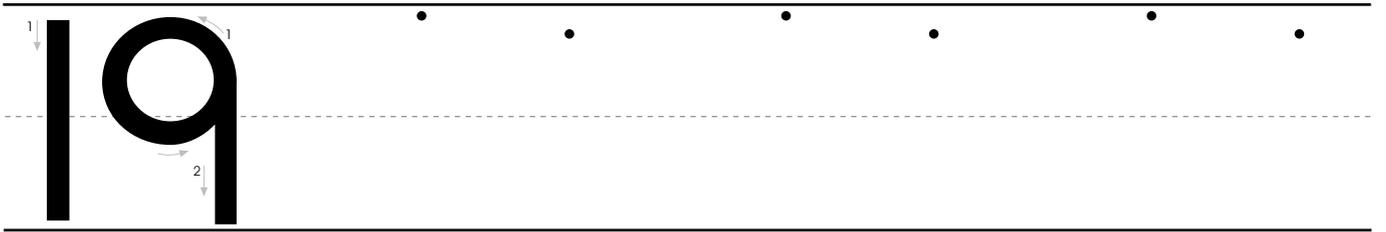
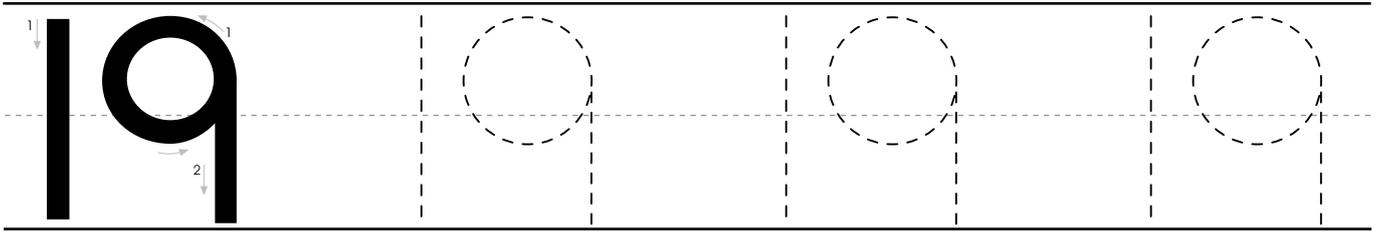
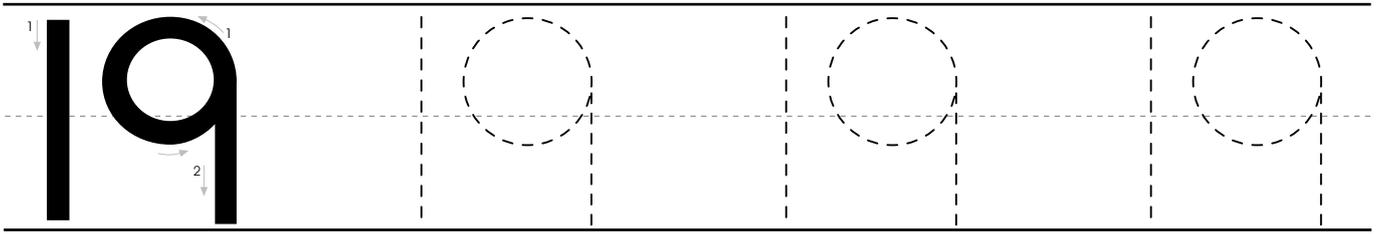
Writing practice



Writing practice



Writing practice



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Teaching notes

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Teaching notes

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