

**Teaching
Guide 2**

MATHS

Learning Numbers to 10

Add and Take Away to 10

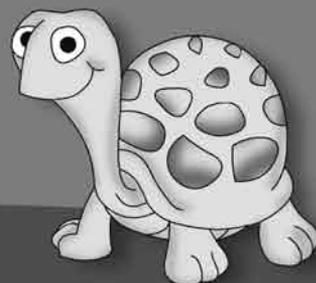
Second Shapes and Measurement

SUE GILBERT

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Introduction

Given that no two students are alike in the way they learn, and no two teachers are alike in the way they teach, it would be impossible to provide a set of definitive plans for any lesson. The lesson plans in this teaching guide are therefore exactly as the title states – guides.

The material and suggestions they contain will, I hope, help teachers to deliver their lessons effectively, but only if modified by the teacher's own knowledge and understanding of their students' interests, strengths, and weaknesses.

This crucial, early stage of a child's education forms the basis for their learning throughout life. If the time spent in the classroom is fun, and success is reinforced through praise, students will be eager and active learners. As well as verbal praise, make sure that the students' books are collected regularly and plenty of positive feedback is given through the use of stickers, stars, smiley faces, etc.

At the same time, any problems that are not addressed at this stage may affect future learning adversely, so make sure that potential problems are identified early and that remedial action is taken when and where necessary.

Although each of the lessons is intended to take one 35–40 minute period, please be flexible as far as timing is concerned and only move on from one topic to the next when you are certain that no misunderstandings remain. A little extra time spent on learning the basics at this stage will ensure steady progress through the later stages.

The book is full of illustrations of objects that should be familiar to the students. Encourage them to talk about these objects in either English or their first language and share their ideas. Similarly, explanations and instructions given in English can be repeated in the students' first language when necessary to reinforce understanding.

Practical work is of great importance in making classroom maths relevant to the world outside. To enable this, ask the students to help you collect simple, everyday items that can be used for practical classroom activities. Items such as plastic bottle tops, buttons, large beads, clean yoghurt pots, plastic bottles of different shapes and sizes, clean, empty packets from toothpaste, soap, tissues, cereal and other food items boxes, and cardboard tubes from kitchen and toilet rolls (these can be sterilized by placing them in a microwave oven for a minute or two) will all be useful for introductory and recapitulation activities. Begin the collection well in advance of when you will need to use the items.

A list of specific materials is given at the start of each lesson plan so that these can be prepared in advance.

Please ensure that all visual aids are large enough and clear enough to be seen by the students sitting furthest away from the teacher. When small items are used, make it clear to the students that they should not be placed in the mouth, nose, ears, etc. and always collect all the materials at the end of the lesson.

Students work at different rates and to accommodate this, those who finish the work ahead of the others can be asked to colour some of the pictures in the textbook. Colouring is an excellent way to develop fine, motor skills and hand-eye co-ordination, so encourage students who do not have time to colour in class to take their books home and do this for homework.

I hope that both teachers and students will enjoy using the **Excel Maths** series and that a lot of excellent learning will be the result.

Learning Numbers to 10

What's in this section?

After the child has learned the numbers 1 to 5, the next step is to learn to count and recognize numbers 6 to 10. In this section, the child will:

- revise numbers 1 to 5
- identify and draw patterns and groups of particular numbers
- learn to write the numbers 6 to 10.

Throughout this series the child will learn to recognize numbers all around them and become more confident in using them.

The teacher will need to work actively with the children for each activity so they understand what they are expected to do on each page. The children will listen as the teacher reads out the instruction for each activity, and then perform the tasks in the correct sequence.

Reviewing numbers 1-5 Pages 2-3

Teaching Objectives

- to revise numbers 1-5

Learning Outcomes

Students should be able to

- count fluently and accurately from 1-5.
- count up to 5 objects.
- draw up to 5 objects.
- write the numerals 1-5.

Lesson 1 Pages 2-3 Reviewing numbers 1-5

Materials required

- tape/cd/dvd/youtube clip of either *Five Little Speckled Frogs* or *Five Little Ducks*;

Introduction

Begin by asking the students to count from 1-5 round the class.

Write the numerals 1-5 on the board and ask individual students to say the number that you point to.

Hold up a number of fingers or objects, from 1-5, and ask individual students to tell you how many they can count.

Student Activity

Ask the students to open their books at page 2. Look at the example and count the people in the picture. Point out that the correct number (2) has been written on the centre card and ascertain that the correct number of triangles has been drawn. Work through the second and third exercises together.

Give the students a set amount of time to complete the work on page 3 and then check the work as a class.

Recapitulation

Use the tape/cd/dvd/youtube clip to sing either *Five Little Speckled Frogs* or *Five Little Ducks*

Making patterns of 6 Pages 4-5

Teaching Objectives

- to teach students to count to 6
- to help students use two colours to make a repeating pattern of six elements

Learning Outcomes

Students should be able to

- count fluently from 1 to 6.
- count up to six items accurately.
- use two colours to make a repeating pattern of six elements.

Lesson 2 Pages 4-5 Making patterns of 6

Materials required

- coloured pencils or crayons; coloured board markers or chalks;

Introduction

Begin by learning/revising counting to 6 either by counting round the class or by making a circle of students and counting as a ball is thrown from one student to the next; any student who fails to catch the ball or counts incorrectly is out and must sit down. Count forwards and backwards to add variety.

On the board, draw four rows of twelve triangles. Help the students to recall how to make a pattern of 2 on the first row; ask volunteer students to use two colours to make the pattern by colouring pairs of triangles in alternating colours. Ask a student to predict the colour of the next pair of triangles.

On the second and third rows make patterns of 3 and 4 respectively, asking individual students to colour the triangles and predict the next colour.

Finally, ask the students how to make a pattern of 6 from the triangles on the last row and ask two students to colour the triangles.

Student Activity

Ask the students to open their books at page 4. Make sure that every student has access to coloured pencils or crayons. Ask them to count how many beads have been coloured green and then ask them to suggest another colour for the remaining six beads. Decide on a colour and ask them to colour the beads. Remind them to take time so that their work is neat and accurate. Look at the fish and ask the students to count six fish and draw a pencil line after the sixth fish; ask them to count the next set of six fish. Ask the students to select two colours and colour the fish to make a pattern of 6.

Look at the candles on page 5 and ask the students to count six of them and draw a light pencil line after the sixth one; repeat this for the next six candles and then ask the students to colour the candles to make a pattern of 6. Finally ask them to work independently to make patterns of six ice creams and ladybirds.

Recapitulation

Carry out the activity suggested at the bottom of page 5, asking students to repeat actions six times as they count. If you have access to a large area such as a hall or playground, ask them to take steps, hops, strides, etc.; if space is limited, they can clap, knock on the desk, nod their heads, stand up and sit down, etc.

Drawing groups of 6 Pages 6-7

Teaching Objectives

- to help students draw groups of six given items

Learning Outcomes

Students should be able to

- draw groups of six given items.

Lesson 3 Pages 6-7 Drawing groups of 6

Materials required

- plain paper and crayons or coloured pencils/coloured sugar paper and chalks;

Introduction

Draw six simple shapes, e.g. vertical lines, ticks, on the board and ask the students to count them.

Below these draw sets of 5, 4, 3, 2, 1 shapes (e.g. triangles, crosses, v, circles, stars).

Ask the students to count the first set and then ask an individual student to draw one more shape to make a set of 6. Repeat this with the other shapes, adding the correct number to make sets of 6, and then count all sets to ascertain that they are all groups of 6.

Student Activity

Ask the students to open their books at page 6. Explain the first task and work with the students to complete it; count the number of balloons to show there is a group of six balloons.

Look at the first bug and ask the students to count the number of legs. Ask them to draw the same number of legs on each of the other bugs.

Ask the students to look at page 7 and explain that there should be a group of six spots on the dog and six triangles on the caterpillar; make sure they count the one that is already drawn when they make their groups. Give the students a set amount of time to complete the tasks.

Recapitulation

Give the students paper and coloured pencils, crayons or chalks and ask them to draw a group of 6.

Make a classroom display with their patterns.

Writing the number 6 Pages 8-9

Teaching Objectives

- to help students to write the numeral 6

Learning Outcomes

Students should be able to

- write the numeral 6.

Lesson 4 Pages 8-9 Writing the number 6

Materials required

- none

Introduction

Write a large number 6 on the board. Explain that it is the symbol used to represent six.

Trace over the figure with your finger and, as you do, explain how it is written. Ask the students to draw the numeral in the air, repeating the verbal instructions.

Ask them to look around the classroom to look for any examples of the number 6, e.g. on a ruler, clock, etc.

Student Activity

Ask the students to open their books at page 8. Explain that they need to draw number 6 several times to complete each of the pictures on the page. Before they begin to write, ask them to trace over each line with their forefinger. Stress the need to work slowly and carefully. Give the students a set amount of time to complete the exercises and then explain the tasks on page 9 and ask them to complete them.

Recapitulation

Play a team game: divide the students into teams and draw a column for each team on the board. Ask the first student in each team to come to the board and write the number you say (1-6), or write the number representing a group of objects you show them, e.g. four books, two pens, etc. Award points for neatness as well as accuracy.

Making patterns of 7 Pages 10-11

Teaching Objectives

- to teach students to count to 7
- to help students use two colours to make a repeating pattern of seven elements

Learning Outcomes

Students should be able to

- count fluently from 1 to 7.
- count up to seven items accurately.
- use two colours to make a repeating pattern of seven elements.

Lesson 5 Pages 10-11 Making patterns of 7

Materials required

- an assortment of sets of coloured counters, buttons, Lego blocks, pencils, paper shapes, plastic bottle tops, or similar items that can be used to make patterns of 7;

This lesson can follow the structure of Lesson 2

Recapitulation

Ask the students to work in pairs; give out the materials you have prepared and ask them to use these to make their own patterns of seven, e.g. seven red bottle tops, seven white bottle tops. Encourage them to share their ideas with the rest of the class.

Drawing groups of 7 Pages 12-13

Teaching Objectives

- to help students draw groups of seven given items

Learning Outcomes

Students should be able to

- draw groups of seven given items.

Lesson 6 Pages 12-13 Drawing groups of 7

Materials required

- large drawings of incomplete groups of 7, e.g. four stars, six stripes, three smiley faces; Blu-tack, masking tape or similar adhesive material; plain paper and crayons or coloured pencils/coloured sugar paper and chalks;

Introduction

Draw a group of seven items on the board and ask the students to count them. Ascertain that it is a group of 7.

Fix one of the drawings on the board and count the items; ask a volunteer to come to the board and complete the group of 7. Repeat this for the other drawings you have prepared. When all the groups have been completed, count the items in each and ascertain that each is a group of 7.

Student Activity

Ask the students to open their books at page 12 and continue as for Lesson 3

Recapitulation

Give the students paper and coloured pencils, crayons or chalks and ask them to draw a group of seven items of their choice. Display these alongside the groups of 6 that they drew.

Writing the number 7 Pages 14-15

Teaching Objectives

- to help students to write the numeral 7

Learning Outcomes

Students should be able to

- write the numeral 7.

Lesson 7 Pages 14-15 Writing the number 7

Materials required

- a piece of chalk

This lesson can follow the structure for Lesson 4.

Recapitulation

if you have access to a large area or the playground, carry out the activity suggested on page 26, but using seven steps, etc. instead of 9.

Draw a chalk line to mark the start. Ask the students to work in pairs. One student should stand where s/he thinks the seven steps will end and the other student should take the steps, then they can reverse roles. Vary the activity to include hopping, jumping, walking backwards, etc.

Reviewing numbers 1-7 Pages 16-17

Teaching Objectives

- to revise numbers 1-7

Learning Outcomes

Students should be able to

- count fluently and accurately from 1-7.
- count up to seven objects.
- draw up to seven objects.
- write the numerals 1-7.

Lesson 8 Pages 16-17 Reviewing numbers 1-7

Materials required:

- a mini-whiteboard for each student made by placing a sheet of plain white paper inside a plastic folder; a marker pen for each student; an eraser made from tissues or kitchen roll;

This lesson can follow the structure of Lesson 1

Recapitulation

Give each student a mini-whiteboard, marker and eraser. Ask them to write the numeral that you call out and hold up their work for you to see. Vary the activity by drawing a group on the board and asking them to write the numeral that represents the group.

Making patterns of 8 Pages 18–19

Teaching Objectives

- to teach students to count to 8
- to help students use two colours to make a repeating pattern of eight elements

Learning Outcomes

Students should be able to

- count fluently from 1 to 8.
- count up to eight items accurately.
- use two colours to make a repeating pattern of eight elements.

Lesson 9 Pages 18–19 Making patterns of 8

Materials required

- an assortment of sets of coloured counters, buttons, Lego blocks, pencils, paper shapes, plastic bottle tops, or similar items that can be used to make patterns of 8;

This lesson can follow the structure of Lesson 2

Recapitulation

Ask the students to work in pairs; give out the materials you have prepared and ask them to make their own patterns of eight, e.g. eight blue buttons, eight green buttons. Encourage them to share their ideas with the rest of the class.

Drawing groups of 8 Pages 20–21

Teaching Objectives

- to help students draw groups of eight given items

Learning Outcomes

Students should be able to

- draw groups of eight given items.

Lesson 10 Pages 20-21 Drawing groups of 8

Materials required

- large drawings of incomplete groups of 8, e.g. five crosses, seven circles, one star; Blu-tack, masking tape or similar adhesive material; plain paper and crayons or coloured pencils/ coloured sugar paper and chalks;

This lesson can follow the structure of Lesson 3

NOTE: at the bottom of page 20 take time to discuss how to distribute the eight wheels so that there are two for each section of the train.

Recapitulation

Give the students paper and coloured pencils, crayons and chalks and ask them to draw a group of eight items of their choice. Display these alongside their groups of 6 and 7.

Writing the number 8 Pages 22-23

Teaching Objectives

- to help students to write the numeral 8

Learning Outcomes

Students should be able to

- write the numeral 8.

Lesson 11 Pages 22-23 Writing the number 8

Materials required

- none

This lesson can follow the structure for Lesson 4

Recapitulation

Play the team game as in Lesson 4, including numbers from 1-8.

Making patterns of 9 Pages 24-25

Teaching Objectives

- to teach students to count to 9
- to help students use two colours to make a repeating pattern of nine elements

Learning Outcomes

Students should be able to

- count fluently from 1 to 9.
- count up to nine items accurately.
- use two colours to make a repeating pattern of nine elements.

Lesson 12 Pages 24–25 Making patterns of 9

Materials required

- an assortment of sets of coloured counters, buttons, Lego blocks, pencils, paper shapes, plastic bottle tops, or similar items that can be used to make patterns of 9;

This lesson can follow the structure of Lesson 2

Recapitulation

Let the students work in pairs; give out the materials you have prepared and ask them to use these to make their own patterns of 9, e.g. nine pink pencils, nine orange pencils. Encourage them to share their ideas with the rest of the class.

Drawing groups of 9 Pages 26–27

Teaching Objectives

- to help students draw groups of nine given items

Learning Outcomes

Students should be able to

- draw groups of nine given items.

Lesson 13 Pages 26–27 Drawing groups of 9

Materials required

- large drawings of incomplete groups of 9, e.g. four tick marks, six stars, two rectangles; Blu-tack, masking tape or similar adhesive material; plain paper and crayons or coloured pencils/coloured sugar paper and chalks;

This lesson can follow the structure of Lesson 3

Recapitulation

Give the students paper and coloured pencils, crayons and chalks and ask them to draw a group of nine items of their choice. Display these alongside their groups of 6, 7, and 8.

Writing the number 9 Pages 28–29

Teaching Objectives

- to help students to write the numeral 9

Learning Outcomes

Students should be able to

- write the numeral 9.

Lesson 14 Pages 28–29 Writing the number 9

Materials required

- none

This lesson can follow the structure for Lesson 4

Recapitulation

Play the team game as in Lesson 4, including numbers from 1–9.

Making patterns of 10 Pages 30–31

Teaching Objectives

- to teach students to count to 10
- to help students use two colours to make a repeating pattern of ten elements

Learning Outcomes

Students should be able to

- count fluently from 1 to 10.
- count up to ten items accurately.
- use two colours to make a repeating pattern of ten elements.

Lesson 15 Pages 30–31 Making patterns of 10

Materials required

- a tape/cd/dvd/youtube clip of the song One Man Went to Mow a Meadow;

This lesson can follow the structure of Lesson 2

Recapitulation

Use the tape/cd/dvd/youtube clip of the song One Man Went to Mow a Meadow; ask the students to sing as far as nine men. They could hold up the appropriate number of fingers at the start of each verse and bend the fingers as they count down at the end of each verse.

Drawing groups of 10 Pages 32–33

Teaching Objectives

- to help students draw groups of ten given items

Learning Outcomes

Students should be able to

- draw groups of ten given items.

Lesson 16 Pages 32–33 Drawing groups of 10

Materials required

- large drawings of incomplete groups of 10, e.g. eight moons, six fish, four pin men, one sweet. Blu-tack, masking tape or similar adhesive material; plain paper and crayons or coloured pencils/ coloured sugar paper and chalks;

This lesson can follow the structure of Lesson 3

Recapitulation

Give the students paper and coloured pencils, crayons and chalks and ask them to draw a group of ten items of their choice. Display these alongside their groups of 6, 7, 8, and 9.

Writing the number 10 Pages 34–35

Teaching Objectives

- to help students to write the number 10

Learning Outcomes

Students should be able to

- write the number 10.

Lesson 17 Pages 34–35 Writing the number 10

Materials required

- a tape/cd/dvd/youtube clip of the song Ten Green Bottles;

This lesson can follow the structure for Lesson 4

Explain at the beginning that the number ten is written with two numerals, 1 and 0. The numerals must be written close to each other, and always in the same order.

Recapitulation

Use the tape/cd/dvd/youtube clip to teach the song Ten Green Bottles.

Joining the matching sets Pages 36–37

Teaching Objectives

- to help students count groups of 6–10 elements
- to help students match groups of the same size

Learning Outcomes

Students should be able to

- count accurately groups of 6–10 elements.
- match groups of the same size.

Lesson 18 Pages 36–37 Joining the matching sets

Materials required

- picture flashcards of groups of 6–10 familiar shapes or objects, e.g. seven balls, seven pots; nine bats, nine caps, ten dolls, ten books; six crosses, six circles, etc.; Blu-tack, masking tape or similar adhesive material; a tape/cd/dvd/youtube clip of one of either Ten Green Bottles, One Man Went to Mow, or Nick Nack Paddy Wack;

Introduction

Fix the flashcards on the board and ask the students to identify the items in each group and count them. As they count each set, write, (or ask a student to write) the number of items below the flashcard.

When all the sets have been counted, ask a student to find two sets that contain the same number of items and draw a line between them. Repeat this until all the sets have been matched.

Student Activity

Ask the students to open their books at pages 36–37.

Look at each set of animals on page 36 and ask the students to count the number of animals in each set and write the number below/at the side of the box. Check that they have all counted correctly.

Look at the example and ask the students to explain why the line links the two boxes; ask the students to link the other matching sets in the same way.

Give the students a set amount of time to complete the work on page 37 in the same way. Check their answers as a class.

Recapitulation

Sing one or two of the songs you have prepared.

Finding the matching number Pages 38–39

Teaching Objectives

- to help students match a given number of articles (1–10) to the numeral representing that number

Learning Outcomes

Students should be able to

- match a given number of articles (1–10) to the numeral representing that number.

Lesson 19 Pages 38–39 Finding the matching number

Materials required

- class sets of numerals 1–10 made using Resource sheet 1; picture flashcards of sets containing 1–10 items; tape/cd/dvd/youtube clip of either Ten Green Bottles, One Man Went to Mow, or Nick Nack Paddy Wack;

Resource sheet 1 Sets of numerals 1-10

Photocopy this sheet on to good quality paper or thin card and cut it up to make a set of numerals 1-10 for each student in the class.

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

Introduction

Give each student a set of numeral cards and ask them to place these on their desk face up in the correct order. This will enable you to check that each student has a full set of cards.

Show the students one of the flashcards; ask them to count how many items there are in the set, and to hold up the correct numeral card so that you can see it clearly.

Repeat this for all the flashcards.

Student Activity

Ask the students to open their books at pages 38–39. Look at the example and ask them to explain why the number 4 has been circled. Look at the second picture and ask the students to decide which number should be circled. If necessary, count the items first. Depending on how much help the students require, either work through page 38 with them before asking them to continue with the work on page 39, or give them a set amount of time to complete the work on both pages before checking their work as a class.

Recapitulation

Sing one of the songs.

Writing the matching number Pages 40–41

Teaching Objectives

- to help students count groups of 1–10 items accurately
- to help students record a number (1–10) by writing the correct numeral

Learning Outcomes

Students should be able to

- accurately count groups of 1–10 items.
- record a number (1–10) by writing the correct numeral.

Lesson 20 Pages 40–41 Writing the matching number

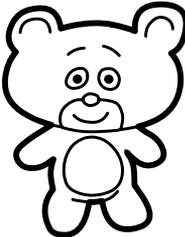
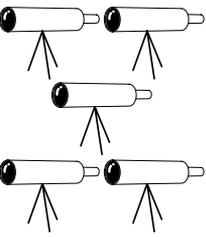
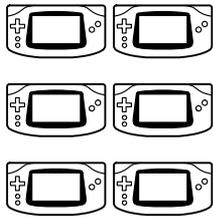
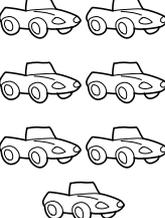
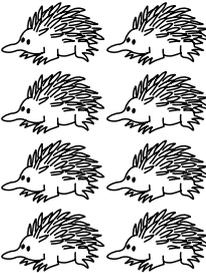
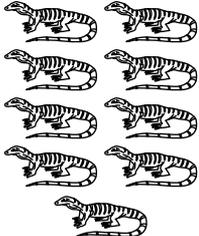
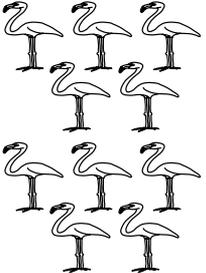
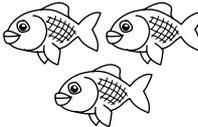
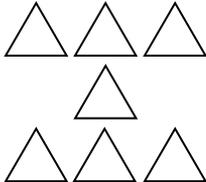
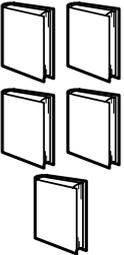
Materials required

- sets of cards made from resource sheet 2; mini-whiteboards, markers and erasers; picture flashcards of sets of 1–10 geometric shapes;

Resource Sheet 2 Memory cards 1-10

Photocopy these sheets on to good quality paper or thin card and cut them up to make enough sets of cards for students to work in pairs or groups of four. To keep sets separate, either use different coloured card/paper, or draw different symbols on the backs of each set.

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

Introduction

Give each student a mini-whiteboard, marker and eraser. Hold up one of the picture flashcards and ask them to count the items, write the correct number on the mini-whiteboard and hold it up so that you can see the number.

Repeat this for all the flashcards.

Student Activity

Ask the students to open their books at pages 40–41. Look at the example, count the dolls and check that the correct number has been written next to them. Look at the beads on page 41; ask the students to count them and write the number 6 in the space. Give them a set amount of time to complete the work on both pages and then check their work as a class.

Recapitulation

Use the memory cards to play a game; the cards should be laid out carefully in 5 x 6 rows, face down. The first student should turn over one card and say what it shows. S/he should then turn over a second card in the same way. In order to win, s/he must turn over a number card and a picture card that match. If they match, the student keeps that pair of cards. If they do not match, the cards should be turned back so that they are face down, and the second student takes a turn. The student with most pairs of cards at the end of the game is the winner.

[To make it easier, you might allow two matching numbers or two equal groups (rather than one of each) to win.]

The students should be familiar with the game, but if necessary, demonstrate a few turns with a small group of students. Stress the importance of placing the cards back in the same position even when there are gaps, to help them remember the positions of the cards.

Drawing the matching sets Pages 42–43

Teaching Objectives

- to help students draw a given number of articles (5–10)

Learning Outcomes

Students should be able to

- draw a given number of articles (5–10).

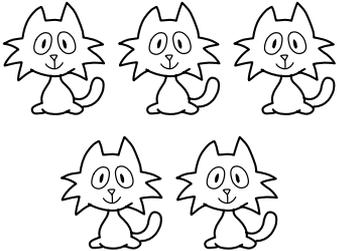
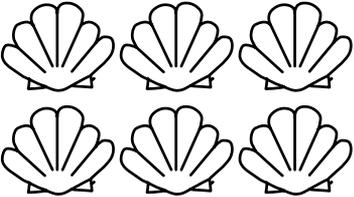
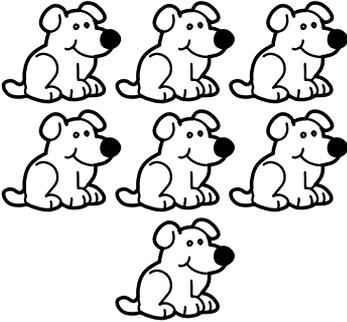
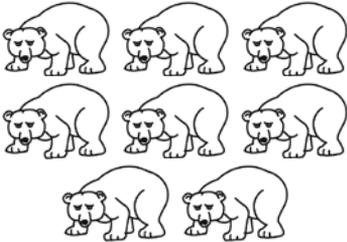
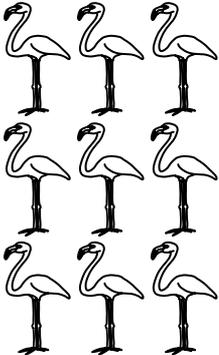
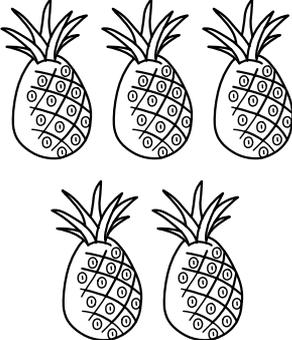
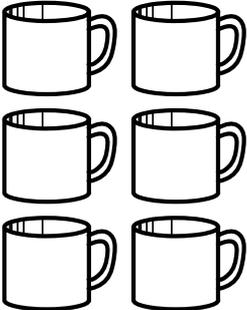
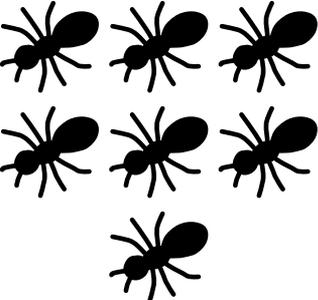
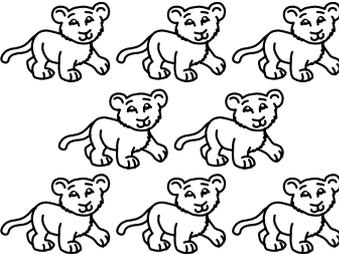
Lesson 21 Pages 42–43 Drawing matching sets

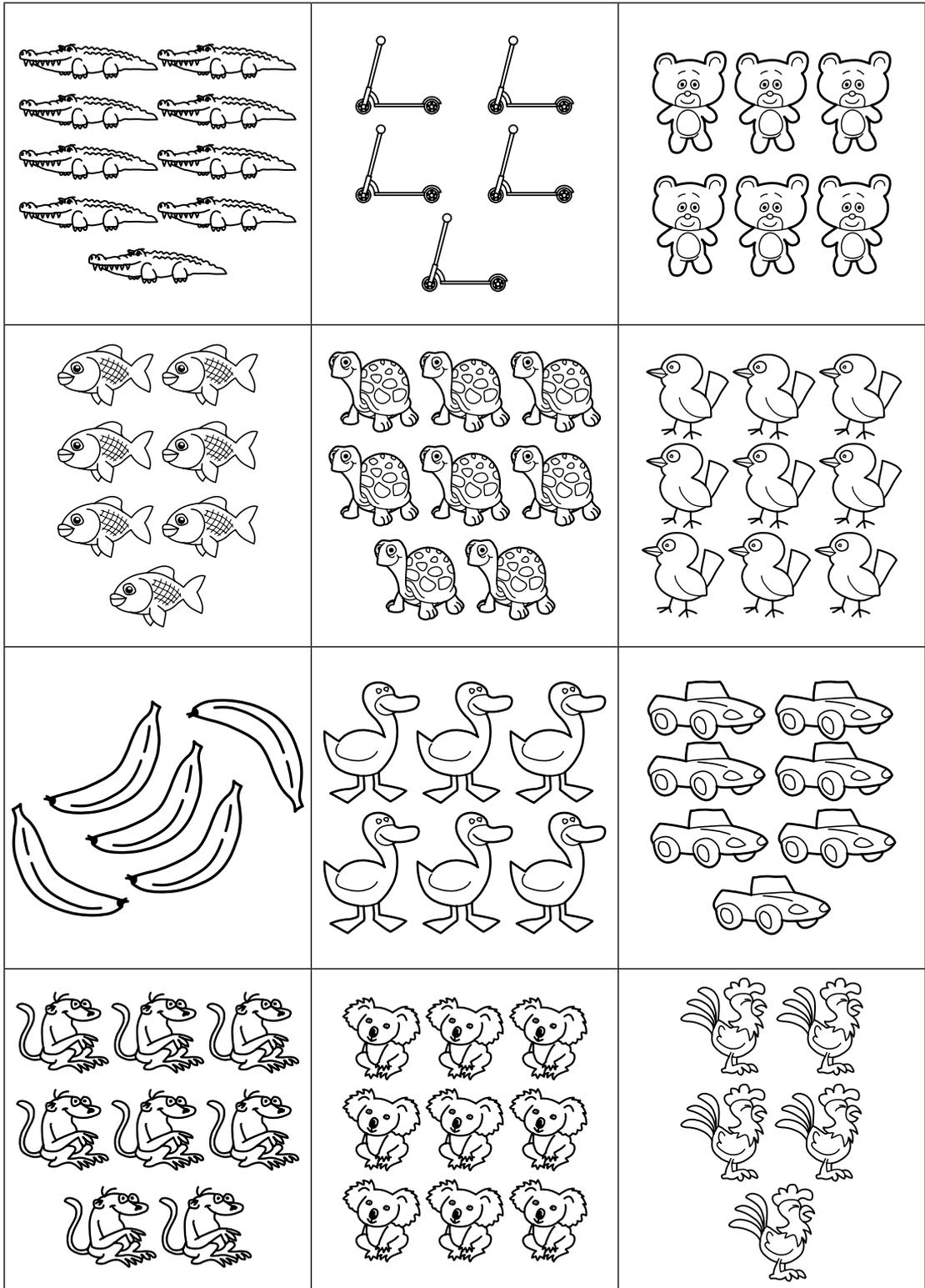
Materials required

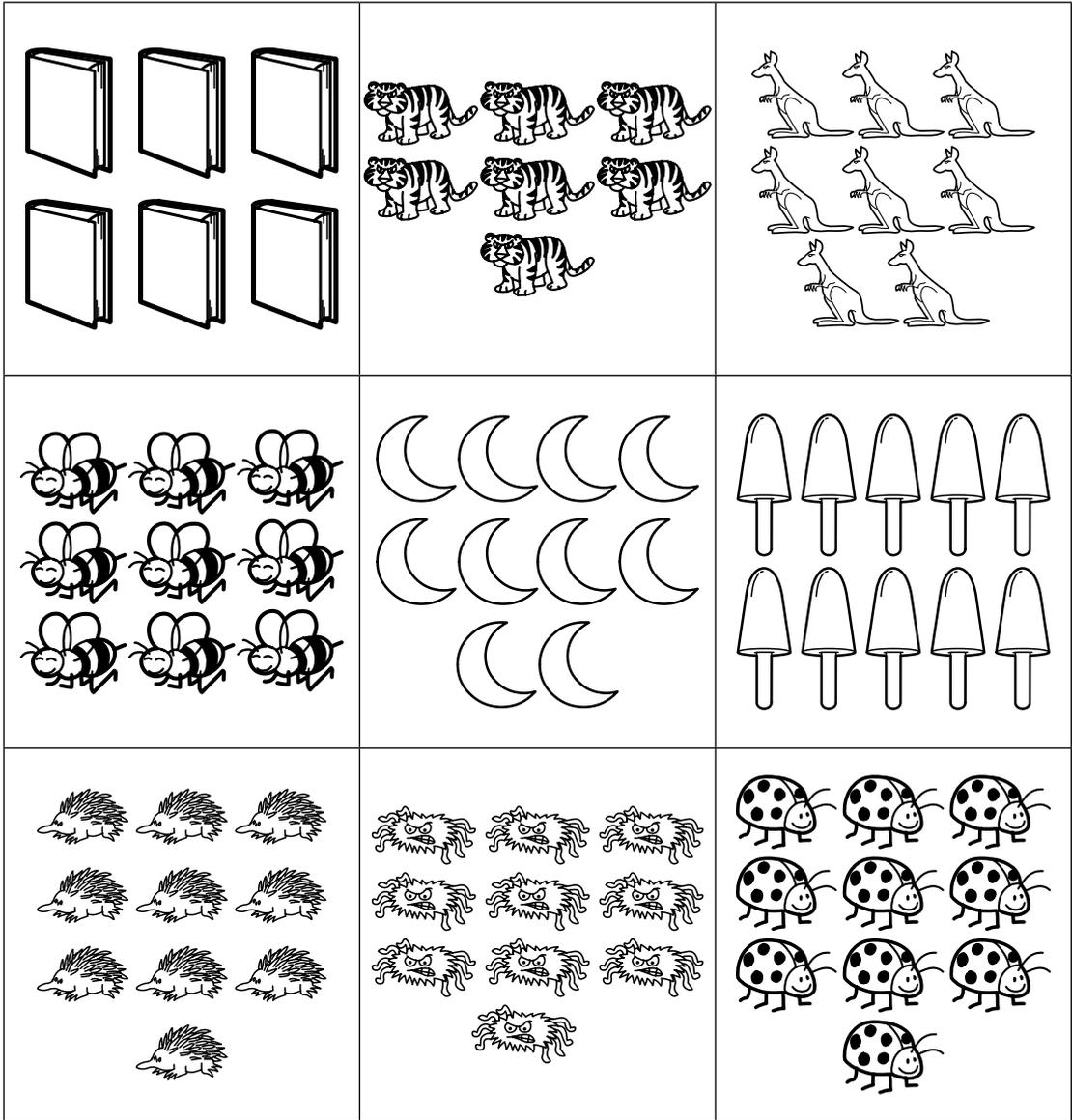
- plastic/paper cups; small items such as Lego blocks, plastic bottle tops, wooden blocks, pencils, crayons etc.; sets of cards made using Resource sheet 3;

Resource sheet 3 Sets (5-10) cards

Photocopy these sheets on to good quality paper or thin card and cut them up to make enough sets of cards for students to work in pairs or groups of four. To keep sets separate, either use different coloured card/paper, or draw different symbols on the backs of each set.





Introduction

Give each student a paper cup and 10–12 of the small items.

Explain that you are going to write a number on the board and the students should put that many items into the cup; partners will check each other's work.

When you have spent some time on this activity, collect the items and cups and draw a large tree on the board. Ask a student/some students to come to the board and draw e.g. 7 apples/ 9 oranges on the tree.

Student Activity

Ask the students to open their books at pages 42–43. Explain the task to the students and give them a set amount of time to complete the work. Stress that both accuracy and neatness are important.

Recapitulation

Use the Sets 5–10 cards to play Snap; students should play in groups of three or four. The cards should be divided equally and placed face down. Remind the students not to look at their cards until they turn them over to add them to the pile. The student who says Snap and puts their hands on the pile of cards when two cards showing the same size sets are played one after the other, wins all the cards on the pile and adds them to his/her own pile. You may wish to demonstrate the game before the students begin to play.

Joining the dots Pages 44–45

Teaching Objectives

- to reinforce the sequence of written numbers from 1–10

Learning Outcomes

Students should be able to

- correctly follow the written sequence of numbers from 1–10.

Lesson 22 Pages 44–45 Joining the dots

Materials required

- a set of flashcards of the numbers 1–10; a large example of a dot-to-dot drawing; Blu-tack, masking tape or similar adhesive material;

Introduction

Begin by asking the students to count from 1–10 and from 10–0.

Fix the set of number flashcards on the board in a random order and ask volunteers to place the numbers in the correct order at the bottom of the board for reference.

Fix your dot-to-dot drawing above the numbers and demonstrate how to draw between the dots in numerical order to complete the picture.

Student Activity

Ask the students to open their books at page 44. Before they begin to draw, ask them to move their finger from one dot to the next in the correct sequence. Do the same for the picture on page 45.

Give the students a set amount of time to complete the work on both pages, reminding them to refer to the numbers on the board if necessary, and to work with care.

Recapitulation

Ask ten students to come to the front of the classroom and give each of them one of the number flashcards.

Explain that when you say go, they should line up in the correct order, holding their number in front of them.

Repeat this enough times to enable all students to have a turn. You could vary it by asking them to line up in descending order, or by timing each group to see which group is fastest.

Colouring by numbers Pages 46–47

Teaching Objectives

- to help students to follow a colour key to colour a picture

Learning Outcomes

Students should be able to

- follow a colour key accurately to colour a picture.

Lesson 23 Pages 46–47 Colouring by numbers

Materials required

- sets of coloured pencils or crayons; coloured chalks or board markers; tape/cd/dvd/ youtube clips of some of the students' favourite number songs;

Introduction

On the board, draw a simple pattern or picture e.g. a house. Write key numbers on different parts of it and draw a set of key circles above the picture (as on page 46).

Ask the students to suggest colours for each of the circles and colour them accordingly. Ask students to colour different parts of your drawing according to the key.

Student Activity

Ask the students to open their books at pages 46–47.

Decide as a class which colour will be used for each circle and colour them accordingly. Ask the students to point to the part of the fish that will be coloured with each colour.

Ask the students to complete the colouring as neatly and carefully as possible.

When they have finished, ask them to choose their own colours and complete the picture on page 47.

Recapitulation

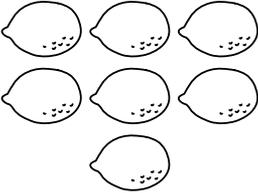
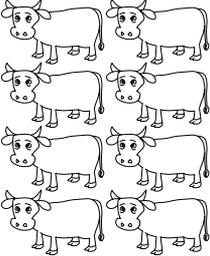
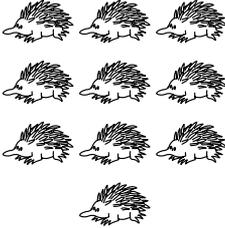
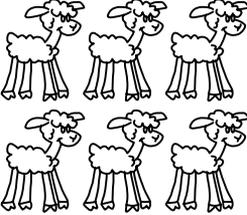
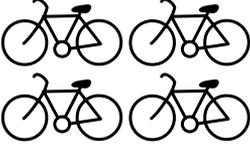
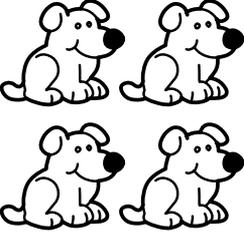
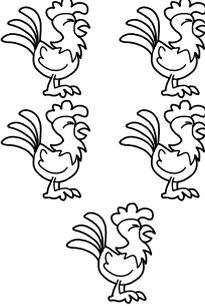
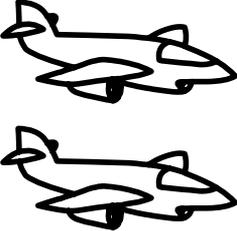
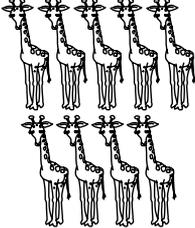
Sing some of the students favourite number songs.

At this point you may want to ask the students to complete assessment sheets 1a and 1b to assess learning.

Reassure the students that the purpose of the assessment is to help you discover any topics that might need further teaching.

Assessment Sheet 1a Numbers 1-10

Count the items and write the correct number next to each set

	3		
			
			
			
			

Assessment Sheet 1b Numbers 1-10

Draw the correct number of things in the box next to the number. You can draw any shape or item that you choose.

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

Add and take away to 10

What's in this section?

Once the children have learned to count up to 10 and can recognize and write numbers 1 to 10, they can take the next step—adding and subtracting. In this section, the children will:

- revise counting and writing numbers 1 to 10
- add and subtract objects up to a total of 10.

Throughout this series, children will learn to recognize numbers all around them and become more confident in using them.

The teacher will need to work actively with the children for each activity so they understand what they are expected to do on each page. The children will listen as the teacher reads out the instructions for each activity, and then perform the tasks in the correct sequence.

Counting and writing 1–10 Pages 50–51

Teaching Objectives

- to help students count groups of 1–10 items accurately
- to help students record a number (1–10) by writing the correct numeral

Learning Outcomes

Students should be able to

- accurately count groups of 1–10 items.
- record a number (1–10) by writing the correct numeral.

Lesson 24 Pages 50–51 Counting and writing 1–10

Materials required

- small items e.g. wooden blocks/beads/buttons/bottle tops; a plastic pot or box; tape/cd/dvd/youtube clip of the song There Were Ten in a Bed;

Introduction

Place the box in a position where all the students can see it clearly. Slowly drop ten of the small items, one-by-one, into the box and ask the students to count as you do; ask a student to write the correct number of objects on the board. Repeat this for other numbers, asking the students to count silently if possible.

Student Activity

Ask the students to open their books at page 50 and look at the example to explain the task. Give them a set amount of time to complete the work on both pages and then check the work as a class.

Recapitulation

Use the tape/cd/dvd/youtube clip to teach the song There Were Ten in a Bed. When the students know the song you could ask a group of ten of them to act it out, using a line of chairs as the bed and removing one chair and student at the end of each verse.

Drawing 1–10 objects Pages 52–53

Teaching Objectives

- to help students draw a given number (1–10) of objects

Learning Outcomes

Students should be able to

- draw a given number (1–10) of objects.

Lesson 25 Pages 52–53 Drawing 1–10 objects

Materials required

- mini-whiteboards, markers, and erasers/tissues;

Introduction

Write a number on the board and ask the students to write the same number of say, spots, crosses, lines, tick marks circles, etc. on their whiteboard. Ask pairs of students to check each other's work and then ask the students to hold up the whiteboards so that you can see their work. Repeat this for different numbers and different symbols.

Student Activity

Ask the students to open their books at pages 52–53. Look at the example to explain the task and then give the students a set amount of time to complete the work on both pages. Check their work for accuracy and neatness.

Recapitulation

Ask the students to perform a given number (1–10) of simple actions e.g. nod your head 6 times; jump on the spot 8 times; clap your hands 3 times.

Adding 1, 2, 3, 4, and 5 more Pages 54–63

Teaching Objectives

- to teach students to add 1, 2, 3, 4, or 5 more to a given number of objects and write the new total

Learning Outcomes

Students should be able to

- add 1, 2, 3, 4, or 5 more to a given number of objects and write the new total, up to and including 10.

Lesson 26 Pages 54–55 Adding 1 more

Materials required

- a set of ten shapes, e.g. triangles, circles, bananas, etc. cut from card; Blu-tack, masking tape or similar adhesive material; tape/cd/dvd/youtube clip of the song One Man Went to Mow;

Introduction

Fix the cut out shapes on the board and draw a large pot or bowl. Place a number of the shapes 'inside' the bowl and ask the students to count them with you; add one more shape and then count to find the new total. Ask a student to write the number.

Repeat the activity, adding 1 to a different number of shapes each time.

Student Activity

Ask the students to open their books at page 54. Use the example to explain the task and then work through the next one or two exercises to ensure that the students understand that they have to draw one more and write the new total. Give the students a set amount of time to complete the work on pages 54–55 and then check the work as a class.

Recapitulation

Sing One Man Went to Mow.

Lesson 27 Pages 56–57 Adding 2 more

Materials required

- none

Introduction

Ask two students to stand at the front of the class and count them. Ask two more students to stand next to them and count again to find the new total. Ask a student to write the new total on the board. Repeat the activity, beginning with a different number of students each time.

Student Activity

Ask the students to open their books at page 56. Use the example to explain the task and then work through the next one or two exercises to ensure that the students understand that they have to draw two more and write the new total. Give the students a set amount of time to complete the work on pages 56–57 and then check the work as a class.

Recapitulation

Ask the students to hold up a number of fingers, e.g. 3, and then hold up 2 more. How many fingers are they holding up now? Ask individual students to answer. Repeat the activity with different numbers of fingers.

Lesson 28 Pages 58–59 Adding 3 more

Materials required

- selection of small items such as counters, buttons, bottle tops, wooden blocks, etc.

Introduction

Make a pile of five books on your desk and count them with the class. One-by-one, ask three students to bring another book to add to the pile. Count as they are added and ask a student to write the new total on the board. Repeat the activity with other classroom items.

Student Activity

Ask the students to open their books at page 58. Use the example to explain the task and then work through the next one or two exercises to ensure that the students understand that they have to draw three more and write the new total. Explain the last exercise, following the instruction at the bottom of the page. Give the students a set amount of time to complete the work on pages 58–59 and then check the work as a class.

Recapitulation

Ask the students to work in pairs. Give each pair ten small items and ask them to work together to make their own 'add 3 more' sums. As they work, walk round and ask pairs of students to explain their sums to you.

Lesson 29 Pages 60–61 Adding 4 more

Materials required

- cut out pictures of nine cup cakes; Blu-tack, masking tape or similar adhesive material; plain paper and coloured pencils or crayons;

Introduction

Tell the students an 'add 4 more' story. Yesterday it was my birthday, so I invited four friends for tea. I went to the baker's shop and bought some cup cakes, one for me (fix one cup cake picture on the board), and one for each of my friends (add four more cakes and then count them all). While I was making the tea, my sister called and said her four children were coming to visit me, so I went back to the baker's shop and bought four more cupcakes (fix four more cakes on the board). Now I had (count) nine cup cakes.

Student Activity

Ask the students to open their books at page 60. Use the example to explain the task and then work through the next one or two exercises to ensure that the students understand that they have to draw four more and write the new total. Explain the last exercise, following the instruction at the bottom of the page. Give the students a set amount of time to complete the work on pages 60–61 and then check the work as a class.

Recapitulation

Play a team game: divide the students into teams and draw a column on the board for each team.

Tell a simple 'add 4 more' story, e.g. I had three sweets and my father gave me four more, so I had ...; I sharpened five pencils and then I sharpened four more; I had six stars and my teacher gave me four more; etc. the team members should take turns to write the new totals on the board.

Lesson 30 Pages 62–63 Adding 5 more

Materials required

- plain paper and coloured pencils or crayons;

Introduction

Draw simple pictures on the board to illustrate 'add 5 more' sums, and ask students to give you the new totals; e.g. I saw three stars in the sky and then I saw five more, so I saw (8) stars altogether; Ali drew two triangles and then he drew five more, so he drew (7) triangles altogether; etc.

Student Activity

Ask the students to open their books at page 62. Look at the example and ask them to suggest a story for the sum. Do the same for the next exercise. Explain the last exercise, following the instruction at the bottom of the page and give the students a set amount of time to complete the work on pages 62–63.

When you check their work as a class, ask students to suggest stories for each of the exercises.

Recapitulation

Give the students plain paper and crayons or coloured pencils and ask them to draw their own 'add' sum.

They should use one colour to show the original number of objects, and a second colour to show the objects that are added. Each student can show his/her puzzle to the rest of the class and tell the story.

Taking 1, 2, 3, 4, and 5 away Pages 64–73

Teaching Objectives

- to teach students to take 1, 2, 3, 4, or 5 away from a given number (up to and including 10) of objects and write the new total

Learning Outcomes

Students should be able to

- take 1, 2, 3, 4, or 5 away from a given number (up to and including 10) of objects and write the new total.

Lesson 31 Pages 64–65 Taking 1 away

Materials required

- set of cut out shapes as used in lesson 26; tape/cd/dvd/youtube clip of Five Fat Sausages, Five Little Ducks, or Five Little Speckled Frogs;

Introduction

Fix the cut out shapes on the board and draw a large pot or bowl. Place a number of the shapes 'inside' the bowl and ask the students to count them with you; take out one shape and then count to find out how many remain. Ask a student to write the number on the board.

Repeat the activity, taking 1 away from a different number of shapes each time.

Student Activity

Ask the students to open their books at page 64. Look at the example and tell a story to explain it; e.g. there were four apples in the bowl and mother ate one of them, so there were (3) apples left. Work through the next one or two exercises, telling similar stories, to ensure that the students understand that they have to take one away by drawing a line through it, and then write the new total. Give the students a set amount of time to complete the work on pages 64–65. As you check their work as a class, ask the students to suggest stories for the sums.

Recapitulation

Use the tape/cd/dvd/youtube clip to sing the song of your choice. Make sure the students understand that one sausage/frog/duck is being taken away each time.

Lesson 32 Pages 66–67 Taking 2 away

Materials required

- plain paper and coloured pencils or crayons;

Introduction

Ask five students to stand at the front of the class, and count them. Ask two of the students to return to their seats, then count again to find the new number of students. Ask a student to write the new total on the board. Repeat the activity, beginning with a different number of students each time.

Student Activity

Ask the students to open their books at pages 66–67. Look at the example and establish that there are five cars, and if two are driven away, three will remain. Work through the next two or three exercises with the students, asking them to suggest a story for each of them. Give the students a set amount of time to complete the work on pages 66–67 and then check the work as a class. Ask for a story for each subtraction sum.

Recapitulation

Ask the students to hold up a number of fingers, e.g. 8, and then take two away. How many fingers are they holding up now? Ask individual students to answer. Repeat the activity with different numbers of fingers.

Lesson 33 Pages 68–69 Taking 3 away

Materials required

- selection of small items such as counters, buttons, bottle tops, wooden blocks, etc.

Introduction

Make a pile of seven books on your desk and count them with the class. One-by-one, ask three students to take away one book from the pile. Count backwards as they are removed and ask a student to write the new total on the board. Repeat the activity with other classroom items.

Student Activity

Ask the students to open their books at page 68. Tell a story as you explain the example like, there were four lions in the zoo; three of them went back to Africa, so there was only one lion left in the zoo. Work through the next one or two exercises to ensure that the students understand that they have to take away three objects each time and write the new total. Give the students a set amount of time to complete the work on pages 68–69 and then check the work as a class, asking for 'take 3 away' stories as you do so.

Recapitulation

Ask the students to work in pairs. Give each pair ten small items and ask them to work together to make their own 'taking 3 away' sums. As they work, walk round and ask pairs of students to explain their sums to you.

Lesson 34 Pages 70–71 Taking 4 away

Materials required

- cut out pictures of seven balloons; Blu-tack, masking tape or similar adhesive material; plain paper and coloured pencils or crayons;

Introduction

Tell the students a 'taking 4 away' story. Yesterday I went shopping and I bought seven balloons (count as you fix the 7 balloons on the board). On the way home it was very windy and four of the balloons blew away. (remove four of the balloons from the board). Now I had only (count) three balloons.

Student Activity

Ask the students to open their books at page 70. Give the students time to look at the example and ask a volunteer to tell a story about it. Work through the next one or two exercises to ensure that the students understand that they have to take away four each time and write the new total. Give the students a set amount of time to complete the work on pages 70–71 and then check the work as a class, asking for a story for each exercise.

Recapitulation

Play a team game: divide the students into teams and draw a column on the board for each team.

Tell a simple 'taking 4 away' story, e.g. I had Rs 10 and I gave the shopkeeper Rs 4, so I had Rs ...; I had eight sweets and I gave four to my friends, so I had ... left; etc., and ask the members of the teams to take turns to write the new totals on the board.

Lesson 35 Pages 72–73 Taking 5 away

Materials required

- plain paper and coloured pencils or crayons; tape/cd/dvd/youtube clip of There Were Ten in the Bed;

Introduction

Draw simple pictures on the board to illustrate 'taking 5 away' sums, and ask students to give you the new totals; e.g. there were seven birds in the garden and five of them flew away, so there were (2) birds left; there were nine apples on the tree and five fell off, so there were (4) apples left on the tree; etc.

Student Activity

Ask the students to open their books at page 72. Look at the example and ask the students to suggest a story for the sum. Do the same for the next exercise. Give the students a set amount of time to complete the work on pages 72–73. When you check their work as a class, ask students to suggest stories for each of the exercises.

Recapitulation

Give the students plain paper and crayons or coloured pencils and ask them to draw their own 'taking away' sum.

They should draw the original number of objects, and draw a line through the objects that are taken away. Each student can show his/her puzzle to the rest of the class and tell the story. Sing *There Were Ten in the Bed*.

Adding or taking away 1, 2, 3, 4, or 5, Pages 74–83

Teaching Objectives

- to teach the meaning of the + and – signs
- to teach the correct use of the + and – signs to write mathematical operations
- to practise adding and taking away 1, 2, 3, 4, or 5

Learning Outcomes

Students should be able to

- explain that the + sign means add, and the – sign means take away.
- use the + and – signs correctly to write mathematical expressions.
- interpret the + and – signs correctly to perform mathematical operations.
- accurately add or take away 1, 2, 3, 4, or 5 for answers between 1–10.

Lesson 36 Pages 74–75 Adding or taking away 1

Materials required

- mini-whiteboards, markers and erasers;

Introduction

NOTE: depending on the students' ability and confidence you may wish to treat this as two separate lessons, one for the + sign and the next for the – sign. A slow, clear explanation at this stage may lead to better all-round understanding of the principles of addition and subtraction.

Draw a large + sign on the board and explain that it means add. Give an example, e.g. write o o o + o on the board and explain that it means add one more circle to the three that are already there. Ask the students to tell you how many circles there will be altogether and write o o o o. Then write underneath $3 + 1 \longrightarrow 4$.

Hold up five pencils in one hand and ask the students how many pencils you have; hold up one more pencil in the other hand and ask how many you are adding. Write the problem as a sum ($5 + 1 \longrightarrow 6$) on the board. Repeat this with different numbers of pencils and ask a volunteer to write a sum on the board.

Now explain the – sign in the same way.

Student Activity

Ask the students to open their books at page 74–75. Work carefully through the example so that the students understand where the numbers in the boxes have come from, and that the number in the circle is the total number of fish. Work through the other examples together. Point out that with the taking away sums, the larger number must be written before the minus sign.

Recapitulation

Give out the mini-whiteboards, markers and erasers. Write a +1 sum on the board, e.g. $4 + 1$ and ask the students to draw a picture for the sum using e.g. crosses or circles, and to write the answer. Ask them to hold up their work for you to check. Do the same for other + 1 and – 1 sums.

Lesson 37 Pages 76–77 Adding or taking away 2

Materials required

- mini-whiteboards, markers and erasers;

Introduction

Draw a large + sign and a large – sign on the board and ask the students to tell you what they mean.

Next draw a picture sum such as $VVVVVV + VV$ and ask the students to tell you what it means. Ask a volunteer to write the number sum underneath, if possible with the new total ($6 + 2 \longrightarrow 8$)

Ask another volunteer to come to the front and make a +2 sum with pencils, and a third volunteer to write the sum on the board. Repeat the activity as many times as necessary. Do the same to teach minus 2.

Student Activity

Ask the students to open their books at page 76. Work through the example together and then discuss the next two sums before asking the students to complete them. Check their work before moving on to the -2 sums on page 77. Point out again that with the taking away sums, the larger number must come before the minus sign.

Recapitulation

Use the mini-whiteboards as in the previous lesson for + and – 2 sums.

Lesson 38 Pages 78-79 Adding or taking away 3

Materials required

- mini-whiteboards, markers and erasers;

This lesson can follow the structure for the previous lesson.

Recapitulation

Use the mini-whiteboards again, but this time draw a sum on the board using symbols and ask the students to write it in numbers. Partners can check each other's work.

Lesson 39 Pages 80-81 Adding or taking away 4

Materials required

- none

This lesson can follow the structure for the previous lesson.

Recapitulation

Look back over pages 74-81 and help the students to make up stories for each of the sums.

Lesson 40 Pages 82-83 Adding or taking away 5

Materials required

- sets of numeral cards made from Resource sheet 1 (see lesson 19); cards showing the – sign made from small squares of card;

This lesson can also follow the structure for the previous lesson.

Recapitulation

Ask the students to work in pairs and give each pair a set of numeral cards and a card showing the minus sign.

Ask them to place the cards face down on the table. Demonstrate how to turn over two cards and use them with the minus sign to make a sum. It is important that they remember that the larger number must be placed before the minus sign. One student should make a sum and the other student should find the card that shows the correct answer; they should then reverse their roles.

Making groups of 5, 6, 7, 8, 9, and 10

Pages 84–96

Teaching Objectives

- to practise number bonds (addition and subtraction) for 5, 6, 7, 8, 9, and 10

Learning Outcomes

Students should be able to

- demonstrate familiarity with number bonds (addition and subtraction) for 5, 6, 7, 8, 9, and 10.

Lesson 41 Pages 84–85 Making groups of 5

Materials required

- sets of ten counters, bottle tops, wooden blocks, Lego blocks, etc; paper cups;

Introduction

Give each student a set of ten counters, bottle tops, etc. (five in one colour and five in a different colour or of two different types) and a paper cup. Explain that they are going to find ways of making five by adding on. Demonstrate how they are going to put one object (of colour/type 1) into the paper cup and then add objects of the other colour/type until there are five objects in the cup. They can then tip the objects out of the cup and see that $1 + 4$ makes 5. Repeat this for $2 + 3$, $3 + 2$, $4 + 1$ and $5 + 0$.

As they make the sums, write them on the board and at the end, explain that these are all ways of making 5 by addition.

Next ask the students how you can make 5 if you start off with more than 5 items. Help them to explain that you have to take away. To demonstrate this, ask them to place the ten objects in a row as you write 10 on the board. Ask them to remove objects one-by-one, and place them in the cup until there are only five remaining on the desk. If they count how many objects are in the cup, they will see that they have taken 5 away from the original 10. Complete the sum written on the board $10 - 5$. Do the same starting with 9, 8, 7, 6, and 5 objects, writing the sum each time. Explain that these are all ways of making 5 by taking away.

Student Activity

Ask the students to open their books at page 84. Explain the task and work through it in steps: First count how many olives are shown in black, and point out that this is the number written in the first box. Next elicit that because there are fewer than 5 olives, they will have to add more to make five, so the + sign is written in the next box.

Next count how many olives have been added and point out that this is the number written in the final box. Finally, check that the number story is correct by counting the olives on the pizza. Look at the second example and work through the same steps, pointing out this time that because the number of olives is greater than five, it will be necessary to take away to make five so the minus sign will be used.

Work through the rest of the questions on pages 84–85 in the same way.

Recapitulation

Use the counting objects again, ask the students questions to practise number bonds to five by addition. For example, I have three eggs, how many more do I need to make 5?

The lessons listed below can all be taught following the same structure as Lesson 41. Assess the students' confidence and ability and if appropriate, reduce the length of the introductory sessions.

Recapitulation sessions can vary between addition and subtraction number bonds, either done individually or as team games; include some of the number songs too.

Lesson 42 Pages 86-87 Making groups of 6

Lesson 43 Pages 87-88 Making groups of 7

Lesson 44 Pages 89-90 Making groups of 8

Lesson 45 Pages 91-92 Making groups of 9

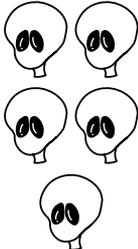
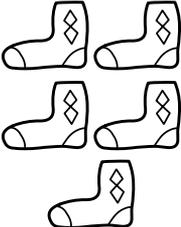
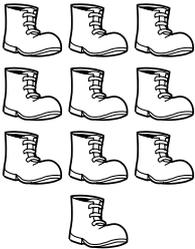
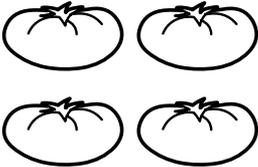
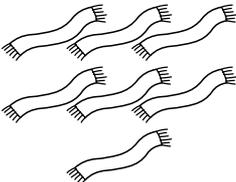
Lesson 46 Pages 93-94 Making groups of 10

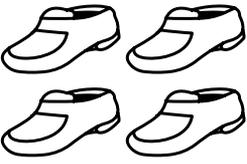
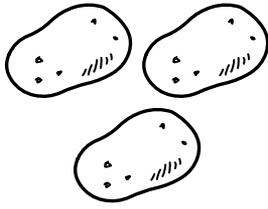
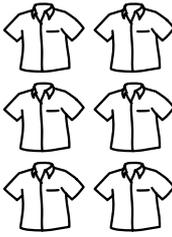
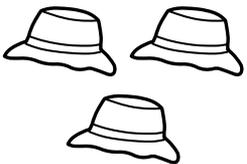
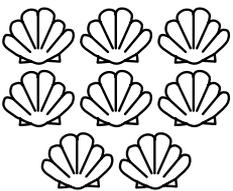
At this point you may wish to ask students to complete Assessment sheets 2a and 2b to assess learning. Reassure the students that the purpose of the assessment is to help you discover any topics that might need further teaching.

Assessment sheet 2a

Count the number of items in the picture and add or take away the number shown. Write the new total in the box.

Write how many there are altogether

	$+$	3	8
	$+$	1	
	$-$	1	
	$+$	6	
	$-$	2	

	+	3	
	-	3	
	+	4	
	-	4	
	+	5	
	-	5	

Assessment sheet 2b

1. Complete the number stories to make 5

4	+	1	5
3			5
7			5

1. Complete the number stories to make 6

3			6
9			6

2. Complete the number stories to make **7**

5			7
9			6

3. Complete the number stories to make **8**

2			8
9			8

4. Complete the number stories to make **9**

4			9
10			9

5. Complete the number story to make **10**

5			10
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Second Shapes and Measurement

What's in this section?

This section will further the children's knowledge of a range of different shapes and give them practice in measuring shapes and pictures in different ways. Book 1, Section 3 in this series, *First Shapes and Measurement*, introduced the children to these concepts, but this section will develop the children's skills in:

- comparing two or more objects by different features
- drawing a range of different shapes and objects
- drawing positions (e.g. 'on top', 'in', 'under')
- putting events into the correct order
- finding paths through mazes.

The teacher will need to work actively with the children for each activity so they understand what they are expected to do on each page. The children will listen as the teacher reads out the instruction for each activity, and then perform the tasks in the correct sequence.

Finding the shorter one Pages 98–99

Teaching Objectives

- to revise the meanings of the terms *long*, *longer*, *short*, and *shorter*
- to help students compare objects by length

Learning Outcomes

Students should be able to

- use the terms *long*, *longer*, *short*, and *shorter* correctly.
- compare objects by length.

Lesson 47 Pages 98–99 Finding the shorter one

Materials required

- a piece of string about 40 cm long for each student

Introduction

Draw two horizontal lines of different lengths on the board. Ask the students to put up their hands if they think the lines are the same length. Ask a student to explain the difference and encourage the use of the terms *long*/*longer*/*short*/*shorter* (learned in Book 1).

Ask two student volunteers with short hair to stand up; decide as a class whose hair is shorter. Hold up two pencils of different colours and lengths; ask the students to say which of them is shorter.

Student Activity

Ask the students to open their books at pages 98–99. Use the example to explain the task.

Give the students a set amount of time to complete the work and discuss the pairs of objects as you check their work as a class.

Recapitulation

Give each student a piece of string. Ask them to use it to measure different objects in the classroom and find three things that are shorter than the piece of string. Make a list on the board of the things the students find.

Drawing one shorter Pages 100 -101

Teaching Objectives

- to help students draw an object that is shorter than a given object

Learning Outcomes

Students should be able to

- draw an object that is shorter than a given object.

Lesson 48 Pages 100-101 Drawing one shorter

Materials required

- sheets of squared paper (or lined if squared is not available); markers or crayons;

Introduction

Draw two wavy, horizontal lines on the board, one shorter than the other. Ask the students to identify the shorter line. Ask a volunteer to draw a third wavy line that is shorter than the others. Draw a rectangle and ask a student to draw a shorter rectangle. If necessary, repeat this with other shapes/objects, e.g. a nail, a can, a simple flower, etc.

Student Activity

Ask the students to open their books at pages 100–101. Look at the example to explain the task and then look at each object and ask the students to indicate with a finger, the length that the shorter one will be.

Give the students a set amount of time to complete the tasks and check their progress as they work.

Recapitulation

Ask the students to work in pairs. Give each student a named sheet of squared (or lined) paper and give each pair a marker or crayon. Explain that the students are going to take off one of their shoes and place a foot on the sheet of paper so that their heel is just on the edge. As they stand, their partner will draw round their foot with the marker or crayon. Then they will change roles, so that each student has an outline of his/her foot.

The students should count how many squares/lines long their foot is (they may need help if they cannot count beyond 10). The drawings can be arranged as a display from longest to shortest, or the information can be used to make a bar chart showing foot lengths.

Finding the smaller area Pages 102–103

Teaching Objectives

- to revise the meaning of the term *area*
- to help students compare the areas of two similar objects

Learning Outcomes

Students should be able to

- use the term *area* correctly.
- compare the areas of two similar objects.

Lesson 49 Pages 102–103 Finding the smaller area

Materials required

- sheets of cm. squared paper; markers or crayons;

Introduction

To revise the meaning of the term *area*, place a book on a sheet of paper on a desk where all the students can see it. Draw round it and then remove the book and quickly shade the space inside the lines. Ask the students to tell you the special name for the space that you have shaded, and remind them that the *area* is the amount of space an object covers.

Show them three or four items and ask them to decide which has the largest/smallest area. If necessary, draw round them in order to make the comparisons.

Student Activity

Ask the students to open their books at pages 102–103. Look at the example to explain the task and give the students a set amount of time to complete the tasks. Check their progress as they work.

Recapitulation

Give each student a sheet of squared paper and a marker. Explain that they are going to find the area of their hand by drawing round it. Demonstrate how to do this by drawing round your own hand on the board; point out that it is easier if you keep all the fingers close together. If there is time, ask the students to shade their work.

When the drawings are complete, help the students to count how many **whole** squares are inside the outline of their hand: this will be an indication of the area of their hand. See whose hand has the largest/smallest area.

These drawings could be displayed by those of the feet. Do the students with the longest feet have the hands with the largest areas?

Drawing a smaller area Pages 104–105

Teaching Objectives

- to practise drawing an object with an area smaller than a given object

Learning Outcomes

Students should be able to

- draw an object with a smaller area than that of a given object.

Lesson 50 Pages 104–105 Drawing a smaller area

Materials required

- none

Introduction

Draw a triangle on the board and ask a volunteer to draw a triangle that has a smaller area next to it.

Repeat this with other simple shapes, e.g. rectangle, square, circle. Elicit that for the area to be smaller, the lines should be shorter.

Student Activity

Ask the students to open their books at page 104–105. Look at the example and compare the areas of the two mats. Look at the other objects and explain that it is not necessary to include all the detail on the new drawings. Give the students a set amount of time to complete the tasks and check the progress of their work.

Recapitulation

Play a team game: divide the students into teams and draw a column for each team on the board. Draw a shape/object/line on the board and ask the first member of each team to come to the board. Say that you would like them to draw one longer/shorter/with a smaller/larger area than the one you have drawn. Draw different shapes/objects so that all students can have a turn.

Finding one smaller Pages 106–107

Teaching Objectives

- to help students compare two similar objects by size to find the smaller

Learning Outcomes

Students should be able to

- identify the smaller of two similar objects.

Lesson 51 Pages 106–107

Materials required

- pairs of similar items of different sizes e.g. books, sheets of paper, school bags, plastic cups, cans, plastic boxes;

Introduction

Show the students one of the pairs of objects you have prepared and ask them to say which one is smaller than the other. Repeat this with the other pairs of objects.

Student Activity

Ask the students to open their books at pages 106–107. Look at the example and compare the sizes of the two apples. Explain that the task is to circle the smaller of each pair of objects. Give the students a set amount of time to complete the tasks and check the progress of their work.

Recapitulation

Ask the students to tell you the beginning of the story of Goldilocks and the Three Bears; emphasise the fact that Daddy Bear was big and had a big chair, a big bowl of porridge and a big bed, Mummy Bear was smaller and had a smaller chair, bowl of porridge and bed, and baby bear was very small and had the smallest chair, bowl of porridge and bed.

Drawing one smaller Pages 108–109

Teaching Objectives

- to help students draw an object that is smaller than a given object

Learning Outcomes

Students should be able to

- draw an object that is smaller than a given object.

Lesson 52 Pages 108–109 Drawing one smaller

Materials required

- none

Introduction

Draw a fairly large balloon on the board and ask a volunteer to draw a smaller copy of it.

Repeat this for another object such as a mug.

Ask the students to look at the pairs of objects and point out that the smaller objects are not only shorter, they are also not so wide/fat.

If necessary, repeat the drawing activity with other simple shapes, e.g. a book, a bag.

Student Activity

Ask the students to open their books at pages 108–109. Look at the first example and note that the drawing is shorter and thinner than the original. Look at the other pictures and discuss what the smaller versions will look like. Give the students a set amount of time to complete the work and then check their work as a class commenting on particularly good examples.

Recapitulation

Make true or false sentences comparing classroom items by size, area and length, e.g. the door is longer than the board. Ask the students to listen and nod if the sentence is true and shake their heads if it is false.

Finding the lighter one Pages 110–111

Teaching Objectives

- to teach the meaning of the terms *light* and *lighter*
- to help students compare objects by weight using the term *lighter*

Learning Outcomes

Students should be able to

- use the terms *light* and *lighter* correctly.
- compare objects by weight using the term *lighter*.

Lesson 53 Pages 110–111 Finding the lighter one

Materials required

- two plastic bags, one partly full of water and the other equally full of cotton wool, (both should be tied at the top); other items that can be compared by weight, e.g. a full plastic bottle and an empty one, bags of sugar, cans of soft drink, a packet of crisps, a bag of rice, a packet of sweets, a plant pot full of soil, an inflated balloon etc.

Introduction

Introduce the term *light* by showing the students the two plastic bags; ascertain that both are full to the same level, but that the one containing the cotton wool is lighter than the one containing water. Demonstrate this by ‘weighing’ one in each hand with the bag of cotton wool held higher than the bag of water. Repeat this with the full and empty bottles.

Show the students some of the other items and ask them to say if they are *light* or *heavy*.

Then show them pairs of items and ask them to point to the one that is the lighter of the two.

Student Activity

Ask the students to open their books at pages 110–111. Look at the example to explain the task. Discuss the other pairs of items before giving the students a set amount of time to complete the work on both pages. Check their work as a class.

Recapitulation

Place all the items you have prepared on a table where all the students can see them. Select one of them and ask individual students to name another item that is *lighter*/*heavier* than the one you have selected. You can also refer to items in the classroom.

Finding cold things Pages 112–113

Teaching Objectives

- to revise the meanings of the terms *hot* and *cold*
- to help students identify things that are cold

Learning Outcomes

Students should be able to

- use the terms *hot* and *cold* correctly.
- name things that are cold.

Lesson 54 Pages 112–113 Finding cold things

Materials required

- a plastic bowl of hot water; a bowl of ice cubes; sheets of plain paper; crayons or coloured pencils;

Introduction

Place the two bowls on a table and ask the students to come and touch the outside of each of the bowls. Talk about the different temperatures to revise the terms hot and cold.

Ask the students to name some other things or places that are cold e.g. ice cream, inside the refrigerator, snow, cold drinks, winter weather, an air conditioned room, etc.

Student Activity

Ask the students to open their books at pages 112–113. Look at the example to explain the task. Look at the other pairs of pictures, talk about all of them and ask the students to circle those that represent cold.

Recapitulation

In the boxes at the bottom of pages 112 and 113, ask the students to draw two or three things that are cold and hot respectively.

Finding what comes first Pages 114–115

Teaching Objectives

- to help students place two events in the correct chronological sequence

Learning Outcomes

Students should be able to

- place two events in the correct chronological sequence.

Lesson 55 Pages 114–115 Finding what comes first

Materials required

- none

Introduction

Ask individual students to tell you what they do first when they wake up and what they do next.

Ask them what they do first at lunch time and what they do next.

Ask them what they do first when they return home from school and what they do next.

Ask them what they do first when they clean their teeth, and what they do next. Etc.

Student Activity

Ask the students to open their books at pages 114–115.

Look at the example, discuss what the two pictures show and establish that the circled picture shows what happens first when making a puzzle. Look at the other pairs of pictures and discuss each of them before deciding together which to circle because it comes first. NOTE: students may need some help with the times shown on the clocks on page 115.

Recapitulation

Give the students one or two minutes to think about what they do each day. Ask each of them to tell you about two things using the words, First I then I begin by giving them an example from your own daily life.

Putting events into order Pages 116–117

Teaching Objectives

- to help students place three related pictures in the correct chronological order

Learning Outcomes

Students should be able to

- place three related pictures in the correct chronological order.

Lesson 56 Pages 116–117 Putting events into order

Materials required:

- sets of cards made using Resource sheet 4;

Introduction

Ask the students to tell you which meal they eat first, second and third during the day.

Ask the students to tell you, in the correct order, three things you do to wash the dishes, or three things you do to cook rice, etc.

Ask questions such as 'Can you dry the dishes before you have washed them?' or 'Can you cook the rice before you put the water in the pan?' etc.

Student Activity

Ask the students to open their books at pages 116–117 and look at the example to explain the task. Talk about the different pictures and the stages of life that each shows, and establish that the picture numbered 1 comes first, then 2 and 3 as shown. Look at the second set of pictures and discuss them in the same way.

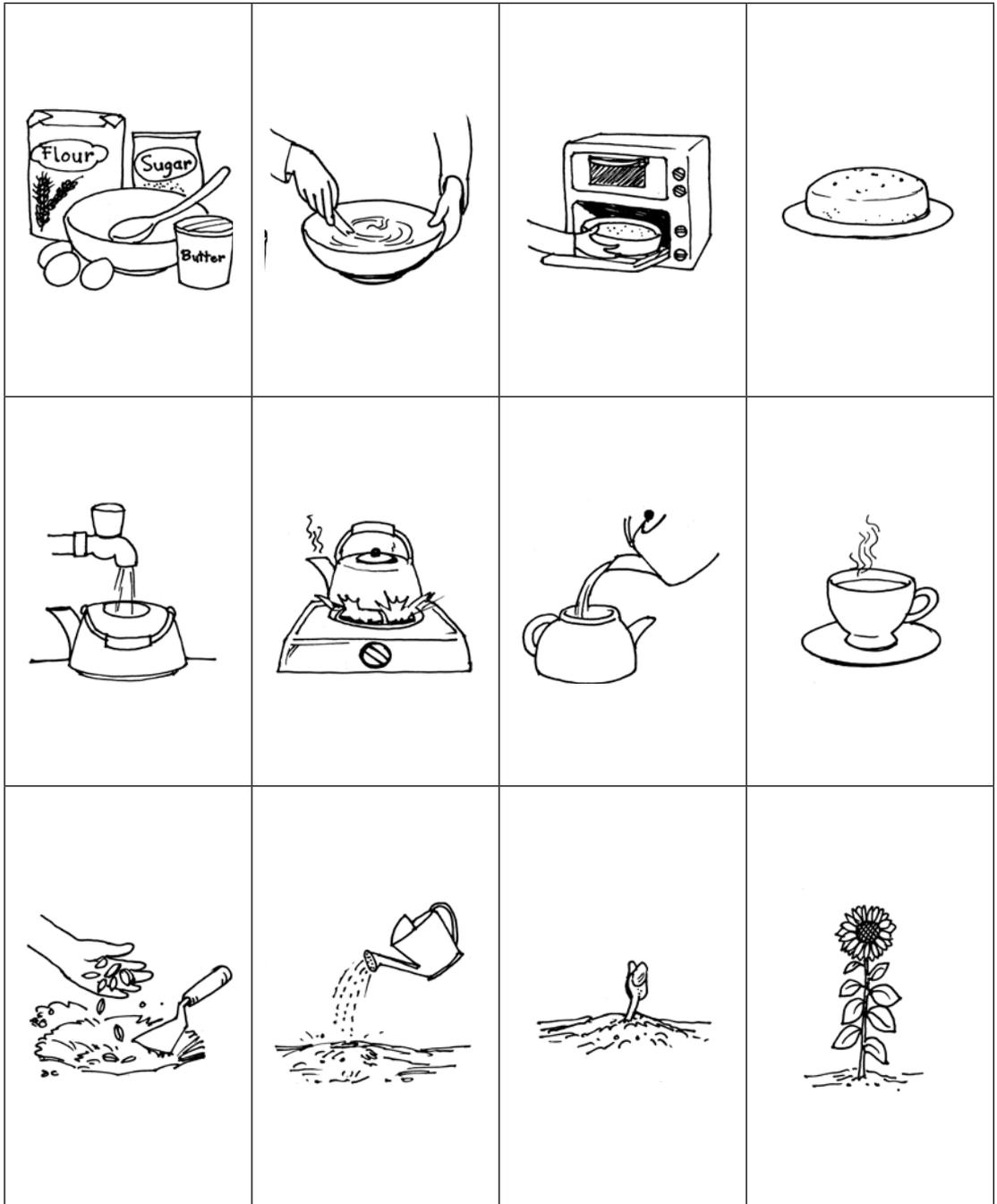
Give the students a set amount of time to complete the work on page 117 and then check their work as a class discussing the differences shown in each set of three pictures.

Recapitulation

The students should work in pairs. Give each pair a set of the First to Last cards. Explain that there are three sets of cards, and each set is made up of four cards. The students must decide which cards go together to make a set of 4 and then put the cards in the correct order.

Resource Sheet 4 First to last

Photocopy this sheet on to good quality paper or thin card and cut them up to make enough sets of cards for students to work in pairs. To keep sets separate, either use different coloured card/paper, or draw different symbols on the backs of each set.



Finding cylinders Pages 118–119

Teaching Objectives

- to teach the meaning of the term *cylinder*
- to help students identify cylinders among a variety of different shapes

Learning Outcomes

Students should be able to

- use the term *cylinder* correctly.
- distinguish items that contain cylinders and items that do not.

Lesson 57 Pages 118–119 Finding cylinders

Materials required

- a selection of cylindrical items, e.g. cans of different sizes, cardboard tubes, length of plastic pipe, drinking straw, a straight-sided glass, etc.; green coloured pencils or crayons; cardboard tubes (from kitchen or toilet paper rolls); squares of coloured card; glue; paints or crayons;

Introduction

Display the selection of items that you have prepared and talk about what each of them is used for. Ask the students to describe the shape and encourage them to observe that there are two circular ends joined by a curved surface. Ask students to suggest other items that are shaped like cylinders, e.g. some bottles and jars, vases, etc.

Student Activity

Ask the students to open their books at pages 118. Look at the items shown and ask the students to identify the cylinder shape in each of them and, where possible, to point to the circular ends and curved surface. Give the students a set amount of time to complete the colouring, then ask them to look at page 119. Explain the task and give them time to complete it before checking it as a class.

Recapitulation

Give each student a cardboard tube and a square of card; they should stick the card to the bottom of the tube to make a base and decorate the outside of the tube with paints or crayons to make a pencil holder.

Finding cones Pages 120–121

Teaching Objectives

- to teach the meaning of the term *cone*
- to help students identify cones among a variety of different shapes

Learning Outcomes

Students should be able to

- use the term *cone* correctly.
- distinguish items that contain cones and items that do not.

Lesson 58 Pages 120–121 Finding cones

Materials required

- a large paper cone; a selection of conical items or items with conical parts, e.g. an ice cream cone, a light shade, a funnel, a folded filter paper, a pointed hat; yellow coloured pencils or crayons; plain paper and coloured pencils or crayons;

Introduction

Show the students the large paper cone and ask them to describe the shape. Point out that it has a circle at one end and a point at the other and that the surface is curved. Open the cone and show the students the shape of the paper.

Display the selection of items that you have prepared and talk about what each of them is used for. Ask the students to identify the cone shape in each of the items. Can they suggest other items that are shaped like cones? (You could ask them to look inside the hole of a pencil sharpener.)

Student Activity

Ask the students to open their books at page 120, discuss each item shown and explain the task. Give the students time to colour the objects and then ask them to complete the task on page 121.

Recapitulation

Give each student a sheet of paper and coloured pencils or crayons and ask them to draw their favourite ice cream cone. They can decorate it in any way they wish. Cut them out and use them to make a classroom display.

Sorting 3 D shapes Pages 122–123

Teaching Objectives

- to revise the term *3D*
- to help students distinguish between a cylinder, a sphere, a cone and a cuboid
- to help students use a colour key to colour different components of a picture

Learning Outcomes

Students should be able to

- distinguish between 2D and 3D shapes.
- identify a cylinder, a sphere, a cone and a cuboid.
- use a colour key to colour different components of a picture.

Lesson 59 Pages 122–123 Sorting 3D shapes

Materials required

- a selection of 3D items of the given shapes as used in previous lessons; coloured pencils or crayons; a selection of empty boxes, tubes, etc. to be used to make models; scissors; glue or paste; paints;

Introduction

Show the students the selection of items that you have prepared and help them to identify the different shapes by name.

On the board, draw a circle, a triangle, and a rectangle and ask the students to explain the difference between the 2D items you have drawn and the 3D items you have shown them. They may recall that 2D objects have no internal space and cannot be stacked on top of each other.

Student Activity

Ask the students to open their books at page 122. Look at the picture and help the students identify the four different 3D shapes; count how many of each shape there are. Point out the key and ask each student to decide on his/her own colour key to colour the picture. Explain that every triangle must be coloured in the chosen colour, etc.

Give the students a set amount of time to complete the work and check their progress. Remind them to take time and work neatly and accurately. When they have finished, ask them to do the same for the picture on page 123, choosing different colours for the shapes.

Recapitulation

Ask the students to work in pairs or groups of 3 or 4 to make and paint a model using the clean, empty modelling materials you have collected. Advise them to assemble the model without glue before they decide on the final shape. You could give them free choice or suggest a theme. This work may continue over more than one lesson.

Drawing circles Pages 124–125

Teaching Objectives

- to help students draw circles

Learning Outcomes

Students should be able to

- draw circles.

Lesson 60 Pages 124 -125 Drawing circles

Materials required

- a selection of circular items e.g. plates, cushion, table mat, cans, dvd, coins, etc.; small circular objects for students to use as templates, or card circles of different sizes to be used as templates; a plain white paper plate for each student; coloured pencils or crayons; coloured paper or thin card; glue; scissors; elastic or string;

Introduction

Show the students the items you have prepared and where necessary, point out the circular face(s) of the items. Talk about the shape of a circle—it is a curved line, and ask the students to suggest other items that are circular such as dvd's, wheels, a clock face, bottle tops, etc.

Student Activity

Ask the students to open their books at pages 124–125 and explain the tasks. Explain that on page 125 they can choose to draw circles of different sizes and colours, or all of the same size and colour. Show them the templates you have prepared for them to use and demonstrate on the board how to draw round one. Give the students a set amount of time to complete the work on both pages. Remind them to work carefully, and check their progress as they complete the tasks.

Recapitulation

Give each student a paper plate and crayons or coloured pencils. You can either ask them to make their favourite meal on the plate using the coloured paper, scissors and glue to make the various components of the meal, or ask them to use the plate and coloured pencils or crayons to make a mask. You will need to help them mark and cut the eye-holes and to punch holes to attach elastic or string to hold the mask in place.

Drawing squares Pages 126–127

Teaching Objectives

- to help students draw squares

Learning Outcomes

Students should be able to

- draw squares.

Lesson 61 Pages 126-127 Drawing squares

Materials required

- a selection of square items, e.g. a chessboard, a dvd box, a paper or linen table napkin, a handkerchief, a cream cracker biscuit, etc.; a tissue (paper handkerchief) for each student; a square sheet of paper for each student (made by folding a sheet of A4 paper into a triangle and cutting off the bottom strip);

Introduction

Show the students the items you have prepared and establish that they are all square; point out that the chessboard is a square that is divided into many (sixty-four) smaller squares. Revise the facts that a square has four sides and four corners, that all sides of a square are the same length, and demonstrate that the table napkin and/or handkerchief is square by folding opposite corners together to make a triangle. Give each student a tissue and ask them to do the same. Ask the students to suggest other items that are square e.g. wall and floor tiles.

Student Activity

Ask the students to open their books at page 128–129 and complete the tasks as in the previous lesson.

Recapitulation

Help the students make a **Fortune teller** from a square sheet of paper.

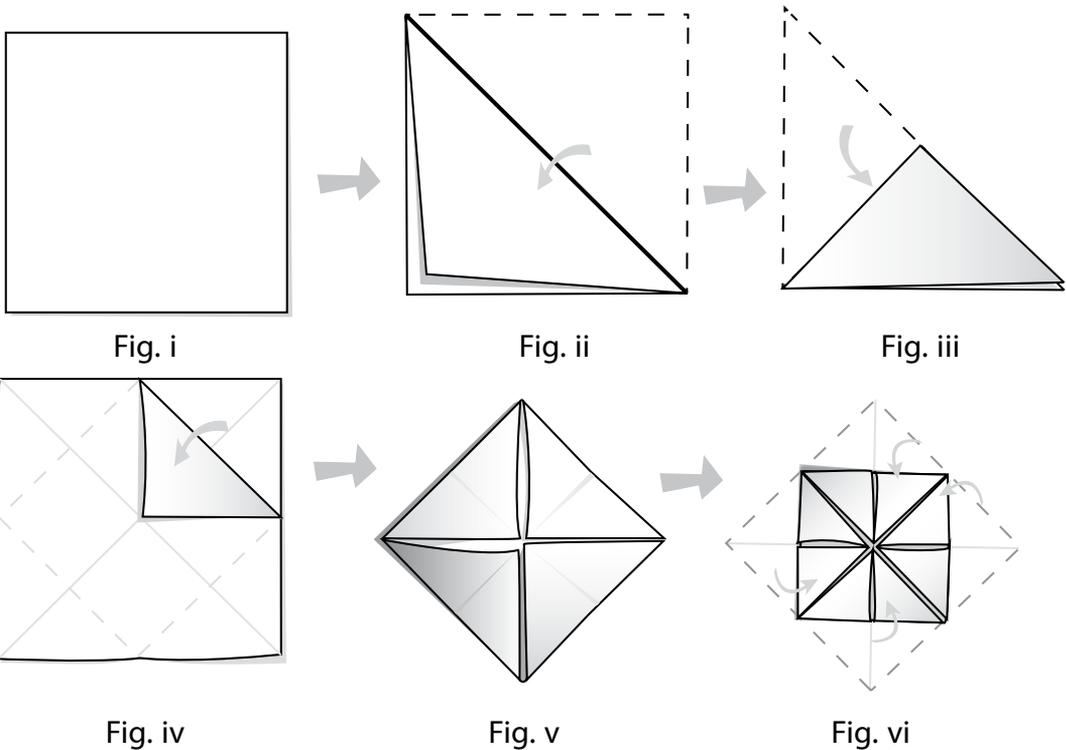




Fig. vii

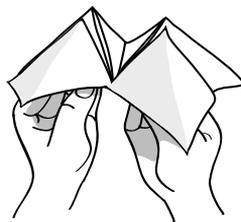


Fig. viii

- 1 Begin with a square of paper (fig. i).
 - 2 Fold the corners of the paper together to form a triangle (fig. ii).
 - 3 Fold the two opposite ends of the triangle together to form a smaller triangle. (fig. iii).
 - 4 Open the paper up, unfolding all the folds.
 - 5 Fold one corner of the paper to the centre of the sheet. (fig. iv).
 - 6 Do the same with the other three corners. (fig. v).
 - 7 Turn the folded paper over and repeat steps 5 and 6 (fig. vi).
 - 8 Write the numbers 1 – 8 on the eight triangular sections.
 9. Fold the paper in half so that the triangles are inside and there are 4 square flaps on the outside. (fig. vii).
 10. Mark each of the four square flaps with a different colour.
 11. To move the fortune teller, place the two forefingers and two thumbs under the square flaps and move them backwards and forwards and in and out (fig. viii).
 12. Now open up the fortune teller again and add a fortune under each of the numbered flaps. For example:
 - a smiley face = you will be happy
 - a sad face = you will be disappointed
 - a heart = you will have good friends
 - money = you will be rich
 - a star = you will do good work
 - A = your marks will be excellent
 - an aeroplane = you are going to travel
 - a car = you will own a car
 - a birthday cake = you will be invited to a party
 - a horse shoe = you will be lucky
- Ask the students to suggest other ideas.

Fortune telling:

- Ask your friend to choose one of the colours. Spell the name of the colour and move the fortune teller in or out for each letter, e.g. three times for red (r + e + d), four times for pink (p + i + n + k).
- Ask your friend to look inside and choose one of the numbers. Move the fortune teller that many times: e.g. if 3 is chosen move the fortune teller three times and if 8 is chosen move it 8 times.
- Ask your friend to choose another number; open that flap and tell them their fortune.

Drawing triangles Pages 128–129

Teaching Objectives

- to help students draw triangles

Learning Outcomes

Students should be able to

- draw triangles.

Lesson 62 Pages 128–129 Drawing triangles

Materials required

- a selection of triangular objects or objects decorated with triangles; a large triangular sheet of paper with a wide border (like a road sign) for each student; crayons, markers or coloured pencils; red paint and paint brushes;

This lesson can follow the same structure as the previous lesson. In the introductory session talk about triangular warning signs seen on the road and, if possible, show students some pictures of these.

Recapitulation

Explain that each student is going to make his/her own road sign using the triangular sheet of paper you have prepared. First they should paint the border red. Ask for ideas for a warning e.g. crying baby, noisy dog, loud television, fast cars, difficult sums, etc. Display their signs in the classroom.

Drawing rectangles Pages 130–131

Teaching Objectives

- to help students draw rectangles

Learning Outcomes

Students should be able to

- draw rectangles.

Lesson 63 Pages 130-131 Drawing rectangles

Materials required

- equipment for potato printing; group sets of potato halves cut to print squares, rectangles, triangles and circles;

This lesson can follow the structure of the previous lesson. On page 131, draw the rectangles inside the frame and ask students to draw a picture of themselves or their family in the large space.

Recapitulation

Divide the students into groups, provide each group with paper and paints (and aprons) and demonstrate how to make patterns by potato printing. Their patterns should contain all four of the shapes.

Joining the dots Pages 132-133

Teaching Objectives

- to reinforce the sequence of written numbers from 1-7
- to help students join dots in the correct order to produce geometric shapes

Learning Outcomes

Students should be able to

- follow correctly the written sequence of numbers from 1-7.
- join dots in the correct order to produce geometric shapes.

Lesson 64 Pages 132-133 Joining the dots

Materials required

- tape/cd/dvd/youtube clips of The Wheels on the Bus Go Round and Round and some counting songs;

Introduction

Briefly revise the four shapes that the students have learned to draw by asking students to name the shape you describe, e.g. It has three sides and three corners.

Student Activity

Ask the students to open their books at pages 132–133. Explain the task and give the students a set amount of time to complete the work on both pages. Check their work as a class and talk about the shapes they have made.

Recapitulation

The Wheels on the Bus Go Round and Round and one or two of the students' favourite counting songs

Drawing patterns Pages 134–135

Teaching Objectives

- to help students draw patterns of repeating geometrical shapes

Learning Outcomes

Students should be able to

- draw patterns of repeating geometrical shapes.

Lesson 65 Pages 134–135 Drawing patterns

Materials required

- coloured pencils or crayons;

Introduction

To revise the concept of patterns, draw a repeating pattern of two geometrical shapes on the board and ask the students to predict the next shape.

Student Activity

Ask the students to open their books at pages 134–135 and look at the first pattern. Point out that it extends across both pages. Look at the other patterns and ask the students to tell you how each pattern would continue. Give the students a set amount of time to complete the work and check their progress. Help them to draw their shapes the same size as the originals.

Recapitulation

Ask the students to use one or two colours to colour their work so that the patterns are retained.

Drawing a picture Pages 136–137

Teaching Objectives

- to help students identify the simple geometric shapes that form parts of a composite picture

Learning Outcomes

Students should be able to

- identify the simple geometric shapes that form parts of a composite picture.

Lesson 66 Pages 136–137 Drawing a picture

Materials required

- coloured pencils or crayons; plain paper/or coloured sugar paper and chalks;

Introduction

Draw a simple picture composed of different shapes on the board, e.g. a snow man made with a large and small circle for the body and head respectively, two smaller circles for eyes, triangles for the nose and buttons, cylinders for arms, a cone for the nose, a square on a rectangle to form a hat, etc. Ask the students to identify and count the shapes.

Student Activity

Ask the students to open their books at page 136 and identify the different shapes used to make the clown. Do the same for the picture of the house on page 137. Explain the task and give the students a set amount of time to complete the work on both pages. Remind them to work carefully, and check their progress.

Recapitulation

Ask the students to draw their own house (or other object) using squares, circles, rectangles and triangles.

Drawing positions Pages 138–139

Teaching Objectives

- to revise the prepositional phrases *on top of*, *inside* and *under*

Learning Outcomes

Students should be able to

- use the terms *on top of*, *inside* and *under* correctly to describe the position of one item relative to another.
- demonstrate understanding of the terms by placing objects in the correct position.

Lesson 67 Pages 138–139 Drawing positions

Materials required

- a box or container with a lid; a ball;

Introduction

Revise the target language by using it as you place the ball *under, inside* and *on top of* the box. Change the position of the ball and ask the students to use the correct phrase to tell you where it is.

Ask them to put their hands on *top of/ under* their desks, etc.

Student Activity

Ask the students to open their books at page 138. Look at the example and ask them to point to the boy who is *on top of/under/inside* the bed. Explain the task and look at the other pictures.

Ask the students to suggest what they might draw in each of the given positions. Give the students a set amount of time to complete the work, and check their progress.

Recapitulation

Ask different students to show their work to the rest of the class and talk about the things they have drawn, using the target language.

Finding the way 1 and 2 Pages 140–143

Teaching Objectives

- to help students find the way through a maze by the trial and improvement method

Learning Outcomes

Students should be able to

- find the way through a maze by the trial and improvement method.

Materials required

- none

Lesson 68 Pages 140–141 Finding the way 1

Lesson 69 Pages 142–143 Finding the way 2

These tasks should require very little introduction since students are already familiar with them from Book 1.

For each maze, ask the students to trace the path with a finger before they use a pencil.

Recapitulation

- Try the activity suggested at the bottom of page 139. To make it simple, ask the students to draw simple geometric shapes rather than more complicated objects in the given positions.
- Try either or both of the activities suggested at the bottom of pages 142 and 143.