Maths for Early Learners

Teaching Guide
Kindergarten

Sue Gilbert

Contents

Introduction

Learning mathematics is learning an important life skill since so many common daily activities, from shopping to paying taxes and planning events, involve the ability to add, take away, multiply, and divide. It is therefore important that the basics are well taught and well learned. The lesson plans in this teaching guide present suggestions and ideas for teachers facing this key task of teaching young children basic mathematical concepts. Counting to 100, and introductions to telling the time and using money are among the topics covered in this book. A repetitive approach will provide reassurance for students of this age and develop their confidence as they can anticipate what they will be expected to do next. But it is also important to make learning fun so there are ideas for introductory and recapitulation activities and games that will add variety and fun to the lessons while reinforcing the formal teaching and learning.

No times are given for the lessons; judge your students' progress and take as many periods as necessary to ensure that they are confident with the new material before moving on.

I hope that you will find this series of student books and the accompanying Teaching Guides easy and enjoyable to use.

Before you begin it may be helpful to read the sections that follow.

Sue Gilbert

Resource sheet

Make a copy of this resource sheet for each student in the class. Since it will be used for several different activities, copy it onto card rather than paper, or, if resources permit, laminate the sheets with clear plastic.

Cut up the sheets to make a complete set of 30 cards for each student.

It is useful to write the name or initials of each student on the back of each card in a set (best done before laminating). This is time-consuming initially, but will help to identify stray cards and ensure that sets remain complete.

Keep each set of cards in a strong envelope or held together with a rubber band.

10	ten
20	twenty
30	thirty
40	forty
50	fifty
60	sixty
70	seventy

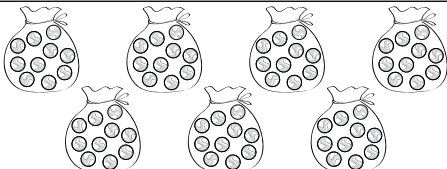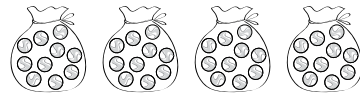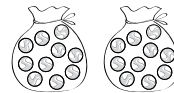| 80	eighty
90	ninety
100	a hundred
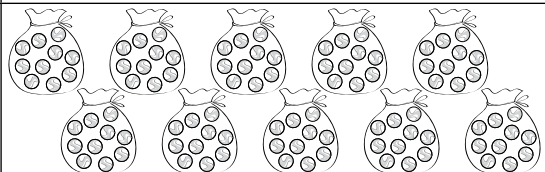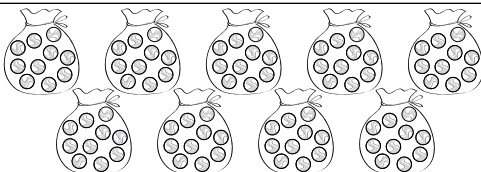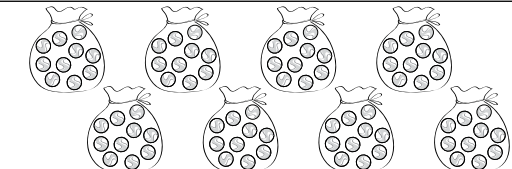
Some useful tips for teaching

Suggested activities using the cards

Note: for some of these activities it will be necessary for the teacher to select the required cards from the set before the lesson since the whole set may not be required.

1. Students can trace over the numbers and words with their finger when learning to write the numbers and words.

2. Write a selection of numbers on the board. Point to one of the numbers and ask the students to hold up the matching card, the corresponding picture, or the corresponding word.

3. Vary the above activity by writing the number words on the board or displaying the flashcards, and asking the students to hold up the corresponding number or picture.

4. Students can work in pairs to play number snap. Use two sets of cards. Initially use only the numbers, or the words, or the pictures. In time, students can mix the cards and say snap for any match of number / word / picture.

5. Students can work in pairs to compare numbers. Each student places number cards in a pile, face down. They take turns over the card on the top of his / her pile. The student whose card shows the largest number wins the pair. This can also be done with the smaller number winning.

6. The students can play memory matching in pairs. Place two matching sets of number cards face down on the table in evenly spaced rows. The first student turns over one card and says what it shows, and then does the same with a second card; both cards should be laid flat on the table in their places. If the numbers on the cards are the same, the student keeps the two cards. If they show different numbers, the cards must be turned back and the second student takes a turn. It is very important that the cards are kept in the same places throughout the game (even when gaps are created by matching pairs being removed) since the game relies on remembering the positions of the cards.

7. The game can be varied by using the word or picture cards, or combinations, so that a match could be made between, for example, a word and a picture showing the corresponding number of items.

8. Students can work in pairs to guess a number. The first student selects a number card and has to help the second student to guess the number he has chosen. For example:

    Student A selects 40.

    Student B guesses 70.

    Student A says 'smaller'.

    Student B guesses 20.

    Student A says 'bigger'. .. until the correct number is guessed

(This activity can be played with the teacher and students initially, with the teacher taking the part of Student A and asking individual students to guess. Students will need to listen carefully to the preceding guesses in order to guess correctly.)

A set of wallcharts has been included with this series which will be very useful for teaching the topics and, when displayed, will be a constant reminder and a point of reference for the students.

Learning to write

Bad writing habits are difficult to overcome, so please ensure that the students are sitting correctly when they write, that their exercise book or paper is straight in front of them and that they are using the correct pencil grip.
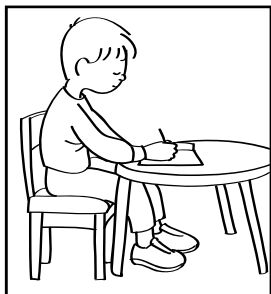
Correct sitting position   correct pencil grip
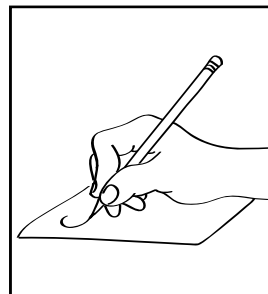
Note: feet should not be dangling
rubber pencil grips

At this stage it is easier for them to use thicker pencils. If possible, supply them with triangular (prism) shaped pencils which are easier to hold and rubber pencil grips are also very useful in ensuring that the pencil is held correctly.

Developing the fine motor control skills needed for writing, is linked to the development of the gross motor skills, so before students attempt to write with pencils, give them sheets of old newspaper and wax crayons to practise writing large numbers and words.

You can also supply each student with a mini-whiteboard made by inserting a sheet of plain white A4 paper into a plastic envelope. Each student will also require a board marker and an eraser made from a small piece of sponge, some tissues or kitchen roll. The student can practise writing the numbers / words on the plastic surface and then erase them.

Making mistakes

We all make mistakes, but there are some children who are unduly worried about doing so. To help them overcome this fear, make some mistakes of your own. For example, write a number the wrong way round, misspell one of the number words or mismatch a picture and number. The students will enjoy pointing out your error and you will be able to ask them to help you correct it. Seeing teacher make a mistake and correct it easily will be reassuring for less confident students.

Instructions for the ball game

Use a fairly large, soft ball.

Ask the students to form a large circle. Begin by saying the first number in the sequence and throwing the ball to one of the students. The student should catch the ball, say the next number, and throw the ball to another student who must catch the ball and say the next number, etc. If a student fails to catch the ball, cannot continue

the sequence, or says the wrong number, s/he should sit down for one minute before rejoining the game.

Using songs and rhymes

There are many English rhymes and songs that involve counting and numbers and the children will enjoy singing the songs or repeating the rhymes. Use them at the beginning or end of a lesson.

Many of these are available on tapes and CD's, and with excellent animation on DVD's and You Tube clips. They include:

One finger, one thumb, keep moving

1, 2, 3, 4, 5, Once I caught a fish alive

The animals went in two by two

One man went to mow a meadow

Five little speckled frogs

Five fat sausages

Ten green bottles hanging on the wall

Two little dickie birds sitting on a wall

One, two, buckle my shoe

Baa, baa black sheep

Hickory dickory dock, the mouse ran up the clock

Three little kittens had lost their mittens

Five currant buns in a baker's shop

Note on materials

Practical work is of great importance in making classroom maths relevant to the world outside. Although most activities suggested in this book require only basic classroom materials, there are a few that call for a wider range of materials. The teacher should therefore begin a collection of 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. A collection of 1, 2, and 5 rupee coins will be of use in the unit that deals with money. 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. Ask the students to contribute to the collections so that gradually a useful and sizeable collection will be readily available.

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.

Lesson 1 | Counting to 20 Pages 4–5

Teaching objectives
- to practise counting up to 20 items
- to revise writing numbers up to 20

Learning outcomes
Students should be able to:
- accurately count up to 20 items.
- write numbers up to 20.

Materials required
drawings of sets of up to 20 shapes or simple objects; Blutak, masking tape, or similar adhesive material; mini-whiteboards, markers and erasers; picture flashcards of up to 20 items (from Teaching Guides 1 and 2)

Introduction
Revise numbers from 1–20 by counting round the class.

Draw on the board sets of between ten and twenty simple shapes, e.g. triangles, circles, etc., and ask student volunteers to count them and write the number next to each set.

Student activity
Ask the students to open their books at pages 4–5.

Talk about the different creatures (mice, parrots, butterflies, pigeons, dogs, ladybirds) and do the first exercise together. Explain that it may help to draw a pencil line through each item as it is counted to avoid counting an item more than once.

Explain that the students should count both types of dog and all of the butterflies and pigeons.

Give the students a set amount of time to complete the other exercises before checking their work as a class.

Recapitulation
Give each student a mini-whiteboard, marker and eraser.

Explain that you are going to show them one of the flashcards and they should count the objects and write the correct number on their whiteboard. When you say, they should hold their answer up for you to see. Make sure you allow enough time for them to count the items on the flashcard.

Lesson 2 | Counting forwards and backwards — Pages 6–7

Teaching objectives
- to revise writing an ascending series of numbers from 1–20 in sequence
- to revise writing a descending series of numbers from 1–20 in sequence
- to revise before, after, and between

Learning outcomes
Students should be able to:
- complete a written sequence of ascending numbers from 1–20.
- complete a written sequence of descending numbers from 10–1.
- say which number is before, after or between given numbers.

Materials required
a ball; flashcards of numbers 1–20; Blutak, masking tape, or similar adhesive material; tape / CD / DVD / You Tube clip of *One man went to mow a meadow*

Introduction
Ask the students to stand in a circle and play the ball game to practise counting from 1–20 and from 20–1.

Fix the flashcard 1 on the board and ask the students to take turns to come and fix the next number until the sequence to 20 is complete. Revise the terms before and after by pointing to a number and asking the students to tell you which number comes before or after it.

Repeat this activity, starting with flashcard 20 and arranging the cards in descending order.

Student activity
Ask the students to open their books at page 6. Explain the task and before the students begin to write, ask them to point to each box and say which number they will write in it. Make sure they follow the directions of the arrows for each sequence.

Give the students a set amount of time to complete the other exercises before checking their work as a class.

Ask them to look at page 7 and work through the exercises together.

Recapitulation
Sing *One man went to mow a meadow*.

Unit 2 Counting in tens and ones

Teaching objectives

- to revise counting in tens from 10–30
- to introduce the numbers forty, fifty, sixty, seventy, eighty, ninety and a hundred
- to practise counting in tens from 10–100

Learning outcomes

Students should be able to:

- count in tens from 10–30.
- begin to use the numbers forty ,fifty, sixty, seventy, eighty, ninety and a hundred correctly.
- begin to count in tens from 10–100.

Materials required

number and picture flashcards for 10–100; Blutak, masking tape, or similar adhesive material; enough small items, e.g. plastic bottle tops, counters for each pair/group of 3 students to have 12 items

Introduction

Use the flashcards to revise the numbers 10, 20, and 30. Fix the cards on the board and ask student volunteers to match the pictures and numbers. Revise the facts that

10 represents one group of ten and no extra ones;

20 represents two groups of ten and no extra ones;

30 represents three groups of ten and no extra ones.

Show the students the picture for 40; elicit that it is four groups of ten and no extra ones, and ask the students to suggest how the number is written. Draw two boxes on the board headed tens and ones and ask a volunteer to write the number on the board, and explain that it is forty.

Repeat this for 50–90.

For 100, elicit that you now have ten tens and explain that it is a hundred. Elicit that you cannot write 10 in the tens box so you will have to draw a third box to write the number. Write the heading hundreds above the third box and write a digit in each box (1 0 0). Explain that this tells you that you have one hundred, no extra tens, and no extra ones.

Student activity

Ask the students to open their books at pages 8–9.

Look at each illustration in turn, count how many 10s each shows and practise saying

the name of the number.

Say a number of tens and ask the students to point to the correct picture.

If the students are confident enough with the names of the numbers, say a number and ask them to point to the correct illustration.

Recapitulation

This activity will help students to count in tens and also enable them to see what a hundred items looks like. Divide the class into 10 small groups, or, if the class is very large, divide it into 20 groups. Give each group 12–15 of the small items and ask each group to make a group of ten. Clear a space on a table or tray at the front of the class and ask each group in turn to bring their set of ten items. As each set is added, count in tens till a hundred is reached.

If it is a large class, make two sets of a hundred.

| **Lesson 4** | Join the dots from 10–100 | page 10 |

Teaching objectives
• to practise counting in 10s from 10–100
• to help students follow a sequence of numbers from 10–100 to complete a picture

Learning outcomes

Students should be able to:
• count in 10s from 10–100.
• follow a sequence of numbers from 10–100 to complete a picture.

Materials required

a soft ball; number flashcards for 10–100; Blutak, masking tape, or similar adhesive material; sheets of paper, coloured pencils or crayons

Introduction

Play the ball game to practise counting in tens from 10–100.

Fix the number flashcards on the board in a random order and ask student volunteers to take turns to arrange them (one number per student) in the correct order. When they are in order, point to a flashcard and ask a student to tell you the number and what it represents, for example, sixty is six sets of ten and no extra ones.

Student activity

Ask the students to open their books at page 10. They will be familiar with the task, but ask them to use a finger to move from one number to the next before they complete the work in pencil.

Give the students a set amount of time to complete the work and comment on careful, neat work.

Recapitulation

Give each student a sheet of paper and coloured pencils and demonstrate on the board how they can create their own join-the-dots picture. They should draw an outline in pencil first and add the numbers and dots before erasing the original line and adding colour where parts of the line remain.

Students can exchange work and complete each other's pictures; these can then be used as a classroom display.

| **Lesson 5** | Counting in tens and ones from 10 to 20 Pages 11–12 |

Teaching objectives

*   to revise counting from 10–25
*   to reinforce the concept of tens and units

Learning outcomes

Students should be able to:

*   count accurately from 10–25.
*   explain that a two-digit number between 10 and 25 represents 1 or 2 groups of 10s and a number of extra 1s.
*   explain that 20 represents two complete groups of 10 and no extra 1s.

Materials required

1 bundle of 10 items and 10 extra items, e.g. rulers, books, etc.; flashcards of numbers and words 10–20; Blutak, masking tape, or similar adhesive material; mini-whiteboard, marker and eraser for each student

Introduction

Show the students the bundle of ten items and elicit that it represents one complete group of 10. Ask a student volunteer to write the number on the board.

Ask a second volunteer to use the items you have prepared to make another number, e.g. 14, and explain to the class that it is one complete group of ten and 4 extra 1s. If necessary, count the items to demonstrate that the total is fourteen. Ask the student to fix the flashcards showing the number and written form of the number on the board.

Repeat this for other numbers, depending on students' confidence and understanding of the concept.

Student activity

Ask the students to open their books at page 11.

Explain the example and give the students a set amount of time to complete the other exercises before checking their work as a class.

Ask the students to look at page 12. Look at each illustration in turn and for each, ask the students to say the name of the number represented.

Recapitulation

Give each student a mini-whiteboard, marker and eraser. Explain that you are going to describe a number, e.g. one set of ten and three extra ones; they should write the number and, when you say, hold up their work for you to see.

| **Lesson 6** | Counting 21 to 30 | Page 13 |

Teaching objectives

*   to revise counting from 21 to 30
*   to reinforce the concept of tens and units

Learning outcomes

Students should be able to:

*   count accurately from 21 to 30.
*   explain that a given number between 21 and 30 represents a group of two 10s and a number of extra 1s.
*   explain that 30 represents three complete groups of 10 and no extra 1s.

Materials required

2 bundles of 10 items and 10 extra items; picture, word and number flashcards for 21 to 30; Blutak, masking tape, or similar adhesive material; mini-whiteboard, marker and eraser for each student

Introduction

Show the students the two bundles of ten items and elicit that it represents two complete groups of ten. Ask a student volunteer to write the number on the board.

Ask a second volunteer to use the items you have prepared to make 21 and elicit from the class that it is two complete groups of ten and 1 extra one. If necessary, count the items to demonstrate that the total is twenty-one. Ask the student to fix the flashcards showing the number, picture, and written form of the number on the board.

Repeat this for other numbers between 21 and 30.

Student activity

Ask the students to open their books at page 13 and proceed as for page 12.

Recapitulation

Proceed as for previous lesson, using numbers from 21–30.

Lesson 7 | Thirty-one   Page 14

Teaching objectives
- to explain that thirty-one means three groups of ten and one extra one
- to help students count up to thirty-one items
- to explain that the number 31 represents three groups of ten and one extra one
- to demonstrate and practise how to write the number 31
- to explain that thirty-one is the word form of the number 31

Learning outcomes
Students should be able to:
- explain that thirty-one means three groups of ten and one extra one.
- count up to thirty-one items.
- write the number 31 by following verbal instructions and by tracing.
- write the number 31 to represent three groups of ten and one extra one.
- recognize that the word thirty-one means the same as the number 31.

Materials required
3 sets of 10 items plus 1 extra, e.g. 3 piles of text books and 1 extra book; sheets of A4 paper divided into four sections; coloured pencils or crayons

Introduction
Draw two sets of boxes headed tens and units on the board.

Show the students the three sets of ten items you have prepared and ask them to tell you how many items altogether (30). Ask a volunteer to write the number in the first set of boxes and elicit that the number tells us there are three complete sets of ten and no extra ones.

Show the students the three sets of ten and the extra one and ask a volunteer to write the new number in the second set of boxes. Elicit or explain that the new number is thirty-one.

Student activity
Ask the students to open their books at page 14. Ask them to count the number of hens and to draw a large circle round each group of ten hens. Point out the written form of the number and remind the students that it is written with a hyphen. Give them a set amount of time to complete the writing and colouring tasks.

Recapitulation

Give each student a sheet of paper and coloured pencils or crayons. Ask them to write their name on the sheet and to draw a set of 31 items in the first section and write the number 31. Collect their work so that they can continue for 32–34 items in succeeding lessons.

Lesson 8	Thirty-two	Page 15

Teaching objectives

- to explain that thirty-two means three groups of ten and two extra ones
- to help students count up to thirty-two items
- to explain that the number 32 represents three groups of ten and two extra ones
- to demonstrate and practise how to write the number 32
- to explain that thirty-two is the word form of the number 32

Learning outcomes

Students should be able to:

- explain that thirty-two means three groups of ten and two extra ones.
- count up to thirty-two items.
- write the number 32 by following verbal instructions and by tracing.
- write the number 32 to represent three groups of ten and two extra ones.
- recognize that the word thirty-two means the same as the number 32.

Materials required

3 sets of 10 items plus 2 extra; students drawing work from the previous lesson; coloured pencils or crayons

This task should follow the structure of lesson 7.

Recapitulation

Give each student their work from the previous lesson and coloured pencils or crayons. Ask them to draw a set of 32 items in the second section and write the number 32. Collect their work so that they can continue the succeeding lessons.

Lesson 9	Thirty-three	Page 16

Teaching objectives

- to explain that thirty-three means three groups of ten and three extra ones
- to help students count up to thirty-three items

- to explain that the number 33 represents three groups of ten and three extra ones
- to demonstrate and practise how to write the number 33
- to explain that thirty-three is the word form of the number 33

Learning outcomes

Students should be able to:

- explain that thirty-three means three groups of ten and one extra ones.
- count up to thirty-three items.
- write the number 33 by following verbal instructions and by tracing.
- write the number 33 to represent three groups of ten and three extra ones.
- recognize that the word thirty-three means the same as the number 33.

Materials required

3 sets of 10 items plus 3 extra; students drawing work from the previous lesson; coloured pencils or crayons

This task should follow the structure of lesson 7.

Recapitulation

Give each student their work from the previous lesson and coloured pencils or crayons. Ask them to draw a set of 33 items in the second section and write the number 33. Collect their work so that they can complete it in the next lesson.

| **Lesson 10** | Thirty-four | page 17 |

Teaching objectives

- to explain that thirty-four means three groups of ten and four extra ones
- to help students count up to thirty-four items
- to explain that the number 34 represents three groups of ten and four extra ones
- to demonstrate and practise how to write the number 34
- to explain that thirty-four is the word form of the number 34

Learning outcomes

Students should be able to:

- explain that thirty-four means three groups of ten and four extra ones.
- count up to thirty-four items.
- write the number 34 by following verbal instructions and by tracing.
- write the number 34 to represent three groups of ten and four extra ones.
- recognize that the word thirty-four means the same as the number 34.

Materials required

3 sets of 10 items plus 4 extra; students drawing work from the previous lesson; coloured pencils or crayons

This task should follow the structure of lesson 7.

Recapitulation

Give each student their work from the previous lesson and coloured pencils or crayons. Ask them to draw a set of 34 items in the second section and write the number 34. Collect their work and use it to make a classroom display.

Lesson 11	Write the numbers	page 18

Teaching objectives

•   to practise writing the numbers 31–34

Learning outcomes

Students should be able to:

•   write the numbers 31–34 accurately and neatly.

Materials required

mini-whiteboards, markers and erasers; flashcards of pictures and words 31 to 34; tape / CD / DVD / Youtube clip of some of the students' favourite songs

Introduction

Give each student a mini-whiteboard, marker and eraser. Explain that you are going to hold up a picture or number word and they should write the corresponding number on their whiteboard and hold up their work for you to see.

Student activity

Ask the students to open their books at page 18.

Remind the students to start at the red dot each time before giving them a set amount of time to complete the writing practice. Also remind them to take time, and praise all examples of neat, careful work.

Recapitulation

Sing one or two of the students' favourite number songs.

Unit 4 Patterns

Teaching objectives
• to help students identify the elements of a pattern
• to help students complete a pattern by indicating the next element

Learning outcomes
Students should be able to:
• identify the elements of a pattern.
• complete a pattern by indicating the next element.

Materials required
drawings of patterns similar to those on page 19, e.g. 2 cups and 1 cake, 3 triangles and 2 stars, etc.; Blutak, masking tape, or similar adhesive material; paper and coloured pencils / crayons / paints, or sugar paper and coloured chalks

Introduction
Fix one of the drawings you have prepared on the board and elicit from the students that it is a pattern. Ask them to identify the repeating elements and ask a volunteer to add the next element to the pattern.

Repeat this with the other drawings you have prepared.

Student activity
Ask the students to open their books at page 19 and look at each of the patterns in turn, discussing the elements that make up each of them. Explain the task and give the students a set amount of time to complete the exercises before checking their work as a class.

Recapitulation
Give each student materials and ask them to draw their own pattern. Ask each student to talk about his / her pattern to the rest of the class. The patterns can be used to make a classroom display.

| Lesson13–16 | thirty-five / six / seven / eight | pages 20–23 |

Teaching objectives

- to explain that thirty-five / six / seven / eight means three groups of ten and five / six / seven / eight extra ones
- to help students count up to thirty-five / six / seven / eight items
- to explain that the number 35 / 36 / 37 / 38 represents three groups of ten and five / six / seven / eight extra ones
- to demonstrate and practise how to write the number 35 / 36 / 37 / 38
- to explain that thirty-five / six / seven / eight is the word form of the number 35 / 36 / 37 / 38

Learning outcomes

Students should be able to:

- explain that thirty-five / six / seven / eight means three groups of ten and five / six / seven / eight extra ones.
- count up to thirty-five / six / seven / eight items.
- write the number 35 / 36 / 37 / 38 to represent three groups of ten and five / six / seven / eight extra ones.
- recognize that the word thirty-five / six / seven / eight means the same as the number 35 / 36 / 37 / 38.

These lessons should follow the structure for lesson 10. Give as little or as much introduction and support as you judge necessary.

| Lesson 17 | Counting the clowns | page 24 |

Teaching objectives

- to practice writing the numbers 31–38 in the correct sequence

Learning outcomes

Students should be able to:

- write the numbers 31–38 in the correct sequence.

Materials required

a picture of a clown; large number cards from 1–(according to the number of students in the class)

Introduction

Show the students the picture of the clown and talk about clowns. Some of the students may have seen a clown at a circus or a birthday party. Talk about the clothes, shoes, and make-up they wear and what they do.

Student activity

Ask the students to open their books at page 24. Discuss the pictures of the clowns and explain the task. Give the students a set amount of time to complete it before checking their work as a class.

Recapitulation

Give each of the students one of the number cards you have prepared and ask them to form a line so that they are standing in numerical order. When they have completed the task, collect the cards and redistribute them so that they can repeat the activity. Depending on confidence and ability, you could ask them to make the second line in descending numerical order.

Lesson 18	Writing the numbers 35–38	page 25

Teaching objectives

• to practise writing the numbers 35–38

Learning outcomes

Students should be able to:

• write the numbers 35–38 accurately and neatly.

This lesson should follow the structure of Lesson 11.

Unit 6 Number Line

Lesson 19 | Number lines page 26

Teaching objectives

- to demonstrate how to use a number line to count forwards and backwards
- to practise using a number line to count forwards and backwards

Learning outcomes

Students should be able to:

- use a number line to count forwards and backwards.

Materials required

a cardboard cut-out rabbit or frog; Blutak, masking tape, or similar adhesive material; a piece of chalk

Introduction

Draw a number line from 0–10 on the board and use the cut-out animal shape to show the students how to move along the line to count forwards. Move one place at a time and then introduce the idea of moving more than one step at a time. Ask student volunteers to move the cut-out animal a given number of places.

Do the same, moving the cut-out animal backwards to demonstrate counting backwards.

Student activity

Ask the students to open their books at page 26.

Ask them to place their finger at the start of the first line and then move it forwards a given number of places and tell you where they have landed.

Do the same on the second line, starting at 10 and moving backwards a given number of places.

Ask the students to look at the third line and explain the task before giving them a set amount of time to complete it.

Recapitulation

If possible, take the students into the playground and use the chalk to draw a large number line on the ground. The students can take turns to jump along it, forwards or backwards according to your instructions. If there is no suitable outside space write the numbers on sheets of paper and arrange them as a number line of the classroom floor. Fasten them with sticky tape to stop them moving when the students move along the line.

Teaching objectives

*   to revise before, after, and in between

Learning outcomes

Students should be able to:

*   use the terms before, after, and in between correctly.
*   write the number that is before, after, or in between two given numbers.

Materials required

selection of number flashcards from 1–38; Blutak, masking tape, or similar adhesive material; student number cards 20–30 (from Book 2)

Introduction

Draw a number line from 1–15 on the board and use it to revise the terms before, after, and in between by asking students to name the number that comes in a particular place, e.g. the number that comes in between 13 and 15, before 11, etc. Hold up one (or two) flashcards and ask the students to tell you the number that comes before, after or in between. Make sure to include some values over 30.

Student activity

Ask the students to open their books at page 27.

Look at each task and make sure the students understand what they are required to do for each of them. Give the students a set amount of time to complete the tasks, and when you check their work as a class, ask the students to give you a sentence for each answer, e.g 'Seven comes before eight.' 'Twenty-eight comes after twenty-seven.' 'Thirty-one comes in between thirty and thirty-two.'

Recapitulation

Give each student a set of number cards from 20–30. Explain that you are going to describe a number and they must hold up the correct number card. For example, if you say 'I come after 23', they should hold up 24.

Alternatively this can be played as a team game. Divide the class into 3 or 4 teams and draw a column on the board for each team. When you describe a number, members of the teams should take turns to come and write the correct number in their team's column on the board.

Lesson 21	Addition	pages 28–29

Teaching objectives
- to revise simple addition up to eight
- to revise the term more

Learning outcomes
Students should be able to:
- complete simple addition of two numbers up to a total of eight.
- use the term more correctly in the context of addition.

Materials required
a selection of sets of up to 8 items e.g. toy cars, mugs, apples, etc.; paper and coloured pencils or crayons

Introduction
Use the sets of items you have prepared to demonstrate adding one and adding two to a given number of items. For example, show students three apples, ask them to count them, and then add one more and ask them to count again. Revise the term more by asking the students to give you an addition sentence, e.g. 'Three apples and one more apple makes four apples.' after each demonstration.

Use different sets of items to demonstrate addition up to a total of eight.

Student activity
Ask the students to open their books at pages 28–29.

Explain each task and work the first exercise of each set together before giving the students a set amount of time to complete the work on both pages. Check their work as a class, asking for an addition sentence with each answer.

Recapitulation
Give each student a sheet of paper and coloured pencils or crayons. Ask them each to draw an addition sum like those on page 29 and to write the answer. Their work can be used to make a classroom display.

Lesson 22	More and less, larger and smaller	page 30

Teaching objectives
- to revise the terms more and less
- to introduce the terms larger and smaller to compare numbers

Learning outcomes

Students should be able to:

• use the terms more and less correctly.

• write numbers that are 1 or 2 more or less than a given number.

• compare two numbers using the terms larger and smaller correctly.

Materials required

sets of items to illustrate more and less, e.g. 3 jars containing different quantities of sand, water, etc.; sets of items to illustrate larger and smaller e.g. 3 books / mugs / spoons of different sizes; paper and coloured pencils or crayons

Introduction

Begin by teaching or revising larger and smaller: show the students the middle-sized item that you have prepared, e.g. a book and place next to it the larger book. Ask the children to compare the two books by size and introduce the term larger to describe the second book, e.g., the blue book is larger than the red book. If necessary, explain that larger means the same as bigger. Now show the students the third book and elicit that it is smaller than the first book and, if necessary, explain that smaller means littler.

Ask questions about objects in the room to practise using the terms larger and smaller, for example 'Is your chair larger than mine?', 'Is the window smaller than the door?' etc.

When students are confident with these terms, introduce more and less in the same way, using the items you have prepared and establish that more is used for a larger amount of something and less for a smaller amount.

Note: Less is commonly misused in place of fewer. Fewer should be used for countable quantities and less for uncountable quantities such as sand and water. At this stage the important point to make is that less is used for the smaller amount.

To relate the preceding work to numbers, write a pair of numbers on the board and ask the students which is the larger / smaller number. Now write a single number on the board and ask the students to tell you the number that is one more/less than that number.

Student activity

Ask the students to open their books at page 30. Look at each task in turn and work one example with the students before giving them a set amount of time to complete them all. As you check their work as a class, encourage the students to give you full sentences when they answer, e.g. 'Eleven is two more than nine.'

Recapitulation

Play a team game: divide the students into teams and draw a column on the board for each team. Explain that you are going to write a number on the board and then

ask the students to write a number that is one or two more or less than the given number, or one or two larger or smaller than the given number. Students should take turns to write the answers in their team's column.

| **Lesson 23** | Addition | page 31 |

Teaching objectives
• to practise adding two numbers up to a total not exceeding eight

Learning outcomes
Students should be able to:

• correctly add two numbers up to a total of eight.

Materials required
paper and coloured pencils or crayons

Introduction
Draw on the board, or prepare in advance, a picture sum like those shown on page 31, for example two mugs and four mugs, with a series of eight circles below.

Explain that you have two mugs and four mugs and need to know how many mugs there are altogether. Then explain that, to help you find the total, you are going to shade one circle for each of the items. Shade the first circle and draw a line through the first mug to show that you have completed a circle for it. Ask student volunteers to take turns to do the same for the other items. When all the items have a line drawn through them, show the students how to count the shaded circles to reach the total number of mugs. Ask the students to count the mugs with you to check this total.

If necessary, work through another example on the board.

Student activity
Ask the students to open their books at page 31. Look at the example and encourage the students to draw a line through each of the boats as they relate each shaded shape to a boat. Give the students a set amount of time to complete the other two exercises before checking their work as a class.

Recapitulation
Give the students paper and coloured pencils or crayons and ask them to draw their own addition sum, like those on page 31. When they have finished they can exchange work with a partner and complete each other's sum.

Unit 7 Addition

Lesson 24 | The addition sign pages 32–33

Teaching objectives
- to introduce the + sign to mean add
- to introduce the = sign to mean equals
- to demonstrate how to use the above signs to write an addition sentence using numbers

Learning outcomes
Students should be able to:
- recognise and use the + sign to mean add.
- recognise and use the = sign to mean equals.
- use the above signs to read and write addition sentences using numbers.

Materials required
sets of items to make addition sums, e.g. toy cars, wooden blocks, books, pencils, etc.; mini-whiteboards, markers and erasers

Introduction
Place the items you have prepared on a table where all the students can see them and use them to make a simple sum; for example, place three wooden blocks in one pile and five wooden blocks in a second pile and explain that you want to know how many blocks there are altogether. Put the piles together and ask the students to count them to find the answer. Now explain that you are going to show the students how to write what they have just done as a sum. Elicit that the first pile contained three blocks and write the number 3 on the board. Do the same for the second pile and write 5 on the board. Then introduce the + sign and explain that this sign is used to mean add so that whenever they see this sign between numbers, they will know they should add the numbers together. Write the sign between the 3 and the 5 and read the number sentence '3 added 5'. Ask the students to draw the + sign in the air two or three times.

Next introduce the = sign and explain that it means 'is equal to' or 'equals' or 'makes'. Ask the students to suggest where it might be written in the sum and, if necessary, explain that it goes at the end, and will be followed by the answer. Write in the answer. Ask the students to draw the = sign in the air two or three times.

Now ask the students to read the whole number sentence with you, '3 added to 5 equals 8'.

Use the materials you have prepared to demonstrate another example and ask student volunteers to write the number sentence on the board.

Student activity

Ask the students to open their books at page 32.

Read the text and then ask them to read each of the number sentences before working out the answer by counting the fingers, and writing the answers in the boxes.

When they have finished the two tasks, ask them to look at page 33. Again, read the number sentences first and then give the students a set amount of time to write the totals before checking their work as a class. Encourage the students to give a full number sentence when they tell you an answer.

Recapitulation

Give each student a whiteboard, marker and eraser. Explain that you are going to tell them an addition sum and they must write it on their whiteboard using the signs that they have learned, and then hold up their work for you to see.

Unit 8 Counting 39 to 42

| **Lesson 25** | Thirty-nine | page 34 |

Teaching objectives
- to explain that thirty-nine means three groups of ten and nine extra ones
- to help students count up to thirty-nine items
- to explain that the number 39 represents three groups of ten and nine extra ones
- to demonstrate and practise how to write the number 39
- to explain that thirty-nine is the word form of the number 39

Learning outcomes
Students should be able to:
- explain that thirty-nine means three groups of ten and nine extra ones.
- count up to thirty-nine items.
- write the number 39 to represent three groups of ten and nine extra ones.
- recognize that the word thirty-nine means the same as the number 39.

These lessons should follow the structure for lesson 10. Give as little or as much introduction and support as you judge necessary.

| **Lesson 26** | Forty | Page 35 |

Teaching objectives
- to explain that forty means four groups of ten and no extra ones
- to help students count up to forty items
- to explain that the number 40 represents four groups of ten and no extra ones
- to demonstrate and practise how to write the number 40
- to explain that forty is the word form of the number 40

Learning outcomes
Students should be able to:
- explain that forty means four groups of ten and no extra ones.
- count up to forty items.
- write the number 40 to represent four groups of ten and no extra ones.
- recognize that the word forty means the same as the number 40.

This lesson should follow the structure for lesson 10.

Elicit from the students that 40 represents four complete sets of ten and no extra ones.

Forty-one and forty-two   pages 36–37

Teaching objectives
- to explain that forty-one / two means four groups of ten and one/two extra ones
- to help students count up to forty-one/two items
- to explain that the number 41 / 42 represents four groups of ten and one / two extra ones
- to demonstrate and practise how to write the number 41 / 42
- to explain that forty-one / two is the word form of the number 41 / 42

Learning outcomes
Students should be able to:
- explain that forty-one / two means four groups of ten and one / two extra ones.
- count up to forty-one / two items.
- write the number 41 / 42 to represent four groups of ten and one / two extra ones.
- recognize that the word forty-one / two means the same as the number 41 / 42.

These lessons should follow the structure for lesson 10. Give as little or as much introduction and support as you judge necessary.

Lesson 29 | Writing numbers 39 to 42   pages 38–39

Teaching objectives
- to practise writing the numbers 39 to 42
- to help students complete a written sequence of numbers from 1–42

Learning outcomes
Students should be able to:

write the numbers 39 to 42 clearly and accurately.

correctly complete a written sequence of numbers from 1–42.

Materials required
a ball; flashcards of numbers 20–42 or more so that there is a card for each student; Blutak, masking tape, or similar adhesive material; enough pairs of picture and number / number and word / word and picture flashcards so that each student can have one card

Introduction

Count round the class or play the ball game to practise counting from 20 to 42.

Fix the flashcards at the bottom of the board in a random order and ask the students to take turns to arrange them on the board in the correct sequence.

When they are in order, ask some questions to revise before, after and in between, e.g. What number comes after 27?, before 35?, in between 39 and 41?, etc.

Student activity

Ask the students to open their books at pages 38–39 and start with the writing practice on page 39. Remind students to start each number from the red dot. Give them a set amount of time to complete the work.

When the time has elapsed, ask them to look at page 38 and explain that they are going to write the numbers from 1 to 42 in the squares of the grid. Before they begin the task, ask them to point to each square in turn and say which number they will write there. Ask how they will write the number e.g. for 17 they will write 1 followed by 7. Make sure they understand that they should start each row from the left and work to the right.

Give the students a set amount of time to complete the task and as they work, comment on neat, careful work.

Recapitulation

Give each student a flashcard (either a picture or a number) and explain that they must find the student who has the other part of their pair. e.g. the student with a card showing 23 must make a pair with the student with the picture of 23 items and then they should sit down together. Repeat this, using combinations of pictures, words and numbers, or all three together if the number of students is divisible by three.

Lesson 30	Subtraction	pages 40–43

Teaching objectives

- to explain how to find 1 or 2 less than a given number by taking away or counting back
- to explain that the – sign means subtract, minus, or take away
- to practise subtraction

Learning outcomes

Students should be able to:

- find 1 or 2 less than a given number by taking away or counting back.
- explain that the – sign means subtract, minus, or take away.
- complete subtraction sums correctly.

Materials required

sets of up to 9 items to demonstrate subtraction; counters, bottle tops or other small items for the students to work out answers if required; tape / CD / DVD / You Tube clip of *There were ten in the bed*

Introduction

Draw a number line from 0–10 on the board. Use a set of items to demonstrate how to find one less by taking 1 away. For example, set out seven items, count them and then ask a student to take one away and explain that you now have one less and count to find the new total. Show the students how to count back on the number line one space to find the number that is one less than 7. Repeat this for another number and also to demonstrate how to find two less.

Student activity

Ask the students to open their books at pages 40–41 and explain the tasks. Give sets of counters to any students who need them to help them do the sums and give the students a set amount of time to complete them before checking their work as a class.

Ask the students to look at page 42 and work through the first two questions together.

Write the first question as a number sentence on the board 6 – 5 = 1 and explain that the – sign means take away, minus, or subtract. Ask the students to help you write the next question as a number sum (9 – 4 = 5). Explain the remaining tasks on page 42 and those on page 43 and give the students a set amount of time to complete them before checking their answers as a class.

Recapitulation

Sing *There were ten in the bed* and point out that each time you sing the verse, there is one fewer.

Unit 10 Time

Lesson 31 | Time of day page 44

Teaching objectives
- to introduce the terms morning, afternoon, evening, and night
- to relate different activities to different periods of the day
- to discuss daily routines

Learning outcomes
Students should be able to:
- use the terms morning, afternoon, evening, and night correctly to talk about different periods of time.
- correctly relate different activities to different periods of the day.
- talk about daily routines.

Materials required
a selection of items related to the different periods of the day, e.g. a school bag, a lunch time food item, a football or game, pyjamas; paper and coloured pencils, crayons or paints

Introduction
Use the items you have prepared to introduce the different periods of the day, e.g. show the school bag and establish that the students come to school at the beginning of the day—in the morning. You may wish to point out that the weather is usually cooler at this time of day. Repeat this for the other periods of the day; teach the students that we say *in the* morning, *in the* afternoon, *in the* evening and *at* night.

Student activity
Ask the students to open their books at page 44 and look at each picture in turn. Identify the time of day it represents and encourage the students to tell you about all their daily activities, the foods they eat at different times of the day, the people who are in their homes at different times, etc. Bear in mind that not all homes will have the same routines, so encourage students to listen to each other and see how their daily routines are similar and how they differ.

Recapitulation
Ask the students some questions to practise the phrases in the morning, in the afternoon, in the evening, and at night. For example, 'When do you clean your teeth?' (in the morning / at night), etc.

Give them paper and coloured pencils or crayons and ask them to draw a picture of something they do in the afternoon or evening.

Teaching objectives

- •   to introduce the students to an analogue clock
- •   to introduce the terms *face* and *hands* of the clock
- •   to distinguish between the hour hand and the minute hand of a clock
- •   to explain the function of the hands of a clock

Learning outcomes

Students should be able to:

- •   identify the face, hour hand, and minute hand of a clock.
- •   explain the functions of a clock and of the two hands.

Materials required

a large clock, preferably with hands that move independently; red and blue coloured pencils or crayons; materials for each student to make a model clock—a paper or plastic plate with a hole in the centre, split pin, markers, and cut-out hour and minute hands, also with holes punched in them; a clock that you have made using these materials

Introduction

Show the students the clock, point out the numbers 1–12, and introduce the terms face, and hands. Explain that clocks are used to tell the time and we tell the time by looking at the positions of the hands. If possible, move the hands and ask the students to observe that they move at different speeds. Which one moves faster? How far does the small hand move if the large hand makes one complete turn? Explain that time is divided into hours and minutes; minutes are shorter than hours. Ask the students to sit still and in silence for the duration of one minute; if there is a clock in the room with a second hand they could watch the hand move right round the clock while they do this.

Student activity

Ask the students to open their books at page 45 and look at the illustration of the clock.

Ask them to look at the hands and to tell you which number the shorter hand is pointing to (4). Explain that this is the hour hand and it tells us the hour. Explain that the longer hand is called the minute hand and it tells us how many minutes have gone by. Remind them that the minute hand moves more quickly than the hour hand.

Give them a few minutes to colour the hands as directed in the book.

Recapitulation

Give each of the students the materials to make a clock. Show them the one you have made and explain how to make it. Use the plate as the face and begin by marking the numbers on it. Ask the students to begin with 12, 3, 6, and 9 and then fill in the other numbers; they can refer to their books if necessary. Show them how to use the split pin to attach the hands.

Lesson 33	Time – o'clock and half-past	page 46–47

Teaching objectives

- to explain how to tell the time when it is o 'clock and half-past the hour
- to demonstrate how to move the hands of a clock to show a given hour or half-past time

Learning outcomes

Students should be able to:

- tell the time if it is o 'clock or half past the hour.
- move the hands of a clock to show an o 'clock or half-past the hour time.

Materials required

A clock with moving hands; students' model clocks; tape / CD / DVD / You Tube clip of *Hickory Dickory Dock*

Introduction

Using your clock, revise which hand is the hour hand and which is the minute hand.

Point the hour hand to number 1 and point the minute hand to 12. Explain to the students that when the minute hand is pointing to 12, it is the beginning of a new hour and if we look at the hour hand, we will know which hour it is. Elicit that your clock is now showing 1 o 'clock and write this time on the board as 1.00. Move the hour hand to each number of the clock face in turn and ask the students to tell you the time and ask volunteers to write the time in figures on the board. Move the hour hand to different numbers and ask the students to tell you the time.

Give each student the model clock they made in the previous lesson and ask them to move the hands to point to e.g. four o 'clock and hold up their clock for you to see. Repeat this for other times.

Teach half-past in the same way, pointing out that when the minute hand is pointing to six, the hour hand is always half-way between two numbers and the time is half-past the smaller of the two numbers.

Student activity

Ask the students to open their books at page 46 and explain the task. Ask them to draw the minute hand in blue and remind them to make the minute hand longer than the hour hand.

When they have completed this task, ask them to look at page 47. Look at each clock and ask the students to tell you which numbers the hour hand is between. Explain the task and give the students a set amount of time to complete it. Check their work by asking a volunteer to adjust the hands of the clock to show the correct position for each time.

Recapitulation

Sing *Hickory Dickory Dock*.

Unit 11 Counting 43 to 46

Lesson 34-37 | Forty-three / four / five / six
pages 48–51

Teaching objectives
- to explain that forty-three / four / five / six means four groups of ten and three / four / five / six extra ones
- to help students count up to forty-three / four / five / six items
- to explain that the number 43 / 44 / 45 / 46 represents four groups of ten and three / four / five / six extra ones
- to demonstrate and practise how to write the number 43 / 44 / 45 / 46
- to explain that forty-three / four / five / six is the word form of the number 43 / 44 / 45 / 46

Learning outcomes
Students should be able to:
- explain that forty-three / four / five / six means four groups of ten and three / four/ five / six extra ones.
- count up to forty-three / four / five / six items.
- write the number 43 / 44 / 45 / 46 to represent four groups of ten and three / four / five / six extra ones.
- recognize that the word forty-three / four / five / six means the same as the number 43 / 44 / 45 / 46.

These lessons should follow the structure for lesson 10. Give as little or as much introduction and support as you judge necessary.

Lesson 38 | Writing numbers 43 to 46
page 52

Teaching objectives
- to practise writing the numbers 43 to 46

Learning outcomes
Students should be able to:
- write the numbers 43 to 46 clearly and accurately.

This lesson should follow the structure of lesson 11.

Lesson 39 | Shapes

Teaching objectives
- to revise the two-dimensional shapes square, rectangle, triangle, ovoid, and circle
- to revise the solid shapes sphere, cube, cuboid, cylinder, and cone

Learning outcomes
Students should be able to:
- identify the two-dimensional shapes square, rectangle, triangle, ovoid, and circle.
- identify the solid shapes sphere, cube, cuboid, cylinder, and cone.

Materials required
flashcards of the two-dimensional shapes and the three-dimensional shapes; objects which have the shape of the three-dimensional shapes, e.g. a ball, a conical party hat, a tissues box, a piece of plastic or metal pipe, a large dice, etc.; paper and paints or crayons or coloured pencils

Introduction
Show the students the flashcards of the two-dimensional shapes, one at a time. Ask them to name the shape and talk about the characteristics of the shape, e.g. a triangle has three sides, a square has four sides of equal length, etc.

Show the students the flashcards of the three-dimensional shapes and name and discuss each of them in the same way. Show them the items you have brought to class and ask them to match the solid shape shown on each flashcard to the corresponding object.

Discuss the difference between two- and three-dimensional shapes; it is only possible to put something inside a three-dimensional shape.

Student activity
Ask the students to open their books at page 53. Look at each shape in turn, name it and discuss whether it is a flat shape or a solid shape. Explain the task and give the students a set amount of time to complete it before checking their work as a class.

Ask the students to look at page 54. Look at each pair of shapes in turn, name the shape and discuss whether both shapes are the same size or whether one is larger (or smaller) than the other. Explain the task and make sure all students have coloured pencils before asking them to complete the task.

Recapitulation
Give the students paper and paints or crayons or coloured pencils and ask them to draw and colour their own design using some of the shapes they have learned about.

As they work, discuss their work with them and ask them to name the shapes they have used.

Their work can be used to make a classroom display.

| Lesson 40–42 | Forty-seven / eight / nine | pages 55–57 |

Teaching objectives

- to explain that forty-seven / eight / nine means four groups of ten and seven / eight / nine extra ones
- to help students count up to forty-seven / eight / nine items
- to explain that the number 47 / 48 / 49 represents four groups of ten and seven / eight / nine extra ones
- to demonstrate and practise how to write the number 47 / 48 / 49
- to explain that forty-seven / eight / nine is the word form of the number 47 / 48 / 49

Learning outcomes

Students should be able to:

- explain that forty-seven / eight / nine means four groups of ten and seven / eight / nine extra ones.
- count up to forty-seven / eight / nine items.
- write the number 47 / 48 / 49 to represent four groups of ten and seven / eight / nine extra ones.
- recognize that the word forty-seven / eight / nine means the same as the number 47 / 48 / 49.

These lessons should follow the structure for lesson 10. Give as little or as much introduction and support as you judge necessary.

| Lesson 43 | Fifty | page 58 |

- to explain that fifty means five groups of ten and no extra ones
- to help students count up to fifty items
- to explain that the number 50 represents five groups of ten and no extra ones
- to demonstrate and practise how to write the number 50
- to explain that fifty is the word form of the number 50

Learning outcomes

Students should be able to:

- explain that fifty means five groups of ten and no extra ones.
- count up to fifty items.
- write the number 50 to represent five groups of ten and no extra ones.
- recognize that the word fifty means the same as the number 50.

This lesson should follow the structure for lesson 10.

Elicit from the students that 50 represents five complete sets of ten and no extra ones.

Lesson 44	Write the numbers 47 to 50	page 59

Teaching objectives
• to practise writing the numbers 47 to 50

Learning outcomes
Students should be able to:

• write the numbers 47 to 50 clearly and accurately.

This lesson should follow the structure of Lesson 11.

Lesson 45	Join the dots from 1–50	pages 60–61

Teaching objectives
to help students follow a written sequence of numbers from 1 to 50 to complete a join-the-dots picture

Learning outcomes
Students should be able to:

follow a written sequence of numbers from 1 to 50 correctly to complete a join-the-dots picture.

Materials required
a ball; 4 sets of cards, each numbered 1–50; student number and picture cards from 20 to 50.

Introduction
Practise counting from 1–50 round the class or by playing the ball game.

Divide the students into four groups and give each group a set of the number cards you have prepared. Ask them to share the cards between them. Explain that they should work together to arrange the cards in the correct order from 1–50 on one of the desks. When they have finished they should sit quietly with their hands raised so that you can check their work.

Student activity

Ask the students to open their books at pages 60–61. The students will be familiar with the task, but encourage them to work carefully and to ask if they require any help.

Give the students a set amount of time to complete and colour the picture of the dinosaur.

Recapitulation

Ask the students to work in pairs or groups of 3 or 4. Give each pair / group two sets of cards and ask them to combine them to play number snap.

Unit 14 Number sequences

Lesson 46	Write the missing numbers; before, after, and in between	pages 62–63

Teaching objectives
- to help students complete a written number sequence
- to revise before, after and in between
- to help students write the number that comes before, after or in between given numbers

Learning outcomes
Students should be able to:
- complete a written number sequence.
- understand and use the terms before, after and in between correctly.
- write the number that comes before, after or in between given numbers.

Materials required
about 12 student number cards for each student (any selection of numbers from 2 to 50);

Introduction
Draw on the board (or prepare on paper) a number line like those shown in the book, but with different spaces left blank. Ask student volunteers to fill in the blank spaces by writing the missing numbers.

When a number line is complete, use it to revise the terms before, after and in between by asking questions about a number on the line, e.g., Which number comes before 27?, after 24?, in between 21 and 23? To encourage the students to use the terms, point to a number and ask a student to tell you something about the number using the word before, after or in between, e.g. point to number 37 and ask a student to make a sentence about the number using the word after.

Student activity
Ask the students to open their books at page 62. Make sure they understand the task and give them a set amount of time to complete it before checking their work as a class.

Ask them to look at page 63, explain each task, and ask them to complete all of the questions in a given amount of time. When you check their work, ask them to reply in sentences to practise the terms before, after and in between.

Recapitulation

Ask the students to work in pairs. Give each student a set of cards and ask them to place the cards in a pile face down in front of them. The students should take turns to turn over a card and make sentences about the number it shows, For example, a student who turns over the number 32 could say, 'It comes before 33.' Students should award themselves a point for every correct sentence. Pairs should check each other's scoring and ask the teacher if there is any uncertainty.

Lesson 47	More, less, larger and smaller, and counting backwards	pages 64–65

Teaching objectives

• to revise the terms more, less, larger, and smaller

• to practise counting backwards from 20 to 1

• to help students complete a written sequence of numbers from 20 to 1

Learning outcomes

Students should be able to:

• use the terms more, less, larger, and smaller correctly.

• count backwards from 20 to 1.

• complete a written sequence of numbers from 20 to 1.

Materials required

Introduction

Practise counting backwards from 20 to 1 round the class; if students are confident, count back from 30 or 40.

To revise the terms more and less, write a number on the board, e.g. 19, and ask students to tell you the number that is one more or one less than the number.

To revise larger and smaller, write a pair of numbers on the board and ask the students to tell you which of them is larger or smaller.

Student activity

Ask the students to open their books at page 64. Work one example from each of the three sections with the students and then give them a set amount of time to complete the other exercises before checking their work as a class.

Then ask them to look at page 65. Explain the task and ask them to point to each square and say which number they will write in it before they begin to write. Make sure that they follow the direction of the arrows and that they work carefully.

Recapitulation

Play a game: explain that you are going to make a statement about a number. The students must listen carefully and if they think your statement is true, they should raise their hand; if they think it is false, they should cross their arms. Make statements using the terms before, after, in between, larger, smaller, more and less e.g. 6 is a larger number than 4; 19 comes in between 20 and 21; etc.

Unit 15 Addition and Subtraction

| **Lesson 48** | Making 1, 2, and 3 | pages 66–67 |

Teaching objectives
• to demonstrate different ways of making 1, 2, and 3

Learning outcomes
Students should be able to:

• explain different ways of making 1, 2, and 3.

Materials required
4 paper plates; sets of 1, 2, and 3 items, e.g. small balls, toy cars, wooden beads, etc.

Introduction
Place two paper plates where they are clearly visible and place one item e.g. wooden bead on one plate and leave the other plate empty. Explain that you have one bead and no beads and ask the students to tell you how many beads you have altogether. Write this as the sum $1 + 0 = 1$. Repeat this with no beads on the first plate and one on the other and write up the sum $0 + 1 = 1$.

Repeat this to demonstrate the ways of making 2 and 3 as shown in the student book, and ask student volunteers to write the sum for each.

Student activity
Ask the students to open their books at pages 66–67 and work through all the exercises with them as a class.

Recapitulation
Play a game. Divide the students into teams and draw a column on the board for each team. Explain that you are going to write a sum on the board and somebody from each team should come to the board and write the missing number. Write half of a sum and the answer, e.g. ___ + 2 = 3 or 1 + ___ = 3.

Award points for correct answers and make sure every student has a turn to write.

| **Lesson 49** | Making 4 and 5 | pages 68–69 |

Teaching objectives
• to demonstrate different ways of making 4 and 5

Learning outcomes
Students should be able to:

• explain different ways of making 4 and 5.

This lesson should follow the structure of lesson 48.

Teaching objectives

•   to practise addition of two numbers up to a total of 10

Learning outcomes

Students should be able to:

•   add two numbers up to a total of 10.

Materials required

plastic counters or bottle tops; a number line from 1–10 for each student

Introduction

Draw a number line from 1–10 on the board.

Draw a simple picture sum on the board like those shown on page 70. Ask the students to count how many items altogether and then demonstrate how they can use the number line to do the addition by counting on.

Repeat this for another picture sum and ask a student volunteer to demonstrate how to use the number line to check the answer.

Write a simple sum on the board, e.g. 4 + 2 and demonstrate (or ask a student to demonstrate) how to solve it using the number line. Repeat this as many times as necessary so that students are confident about how to use a number line to add.

Student activity

Ask the students to open their books at page 70. Give each student a number line and work through the exercises together, adding by counting, and using a number line to check the total.

Ask the students to look at page 71 and work through the first example using the number line. Make sure that students who need counters to help them are given a set and then give the students a set amount of time to complete the other exercises before checking their work as a class.

Recapitulation

Ask the students to begin the work on page 72, working alone or in pairs; they should write the answers in the spaces next to the sums.

Teaching objectives

• to practise addition of two or three numbers up to a total of 10

• to explain that and, add, and + all mean plus

Learning outcomes

Students should be able to:

• add two or three numbers up to a total of 10.

• explain that and, add, and + all mean plus.

Materials required

plastic counters or bottle tops; a number line from 1–10 for each student; coloured pencils

Introduction

Draw a number line from 1–10 on the board and write an addition sum, e.g. $5 + 2 =$ __.

Ask a volunteer to come and demonstrate how to use the number line to find the answer.

Write an addition sum with three numbers on the board, e.g. $2 + 1 + 2 =$ __, and demonstrate how to solve this, first using objects and then the number line. Repeat this for a different sum.

Write the words *and* and *add* on the board, tell the students what they say, and explain that they both mean the same as the addition sign +.

Finally write on the board a sum like those shown at the bottom of page 73, e.g.

___ + ___ = 4, and ask the students to suggest possible ways of completing the sum.

Complete the sum in two or three different ways to establish that there is more than one possible answer.

Student activity

Ask the students to open their books at page 73. Explain the tasks and make sure that all students have their number lines and that any student who needs counters is given a set. Give them a set amount of time to complete the exercises before checking their work as a class.

Recapitulation

Ask the students to return to the work they began on page 72. Ask them to complete the addition sums and then to colour all the shapes which contain the answer 8.

Lesson 52 | Subtraction

pages 74–77

Teaching objectives

• to revise subtraction

Learning outcomes

Students should be able to:

• complete pictorial subtraction sums correctly by crossing out items and counting.

Materials required

sets of up to 10 small items

Introduction

Show the students one of the sets of items you have prepared, e.g. six toy cars. Count the cars with the students and then explain that you are going to give three of them away. Give one car to each of three students and then ask the students to count to see how many remain. Ask the students to express what you have just done as a subtraction sentence and write the sum $6 - 3 = 3$ on the board.

Repeat this with other items and numbers.

Student activity

Ask the students to open their books at page 74 and work through the first example together. Explain that the number in the first box must be the total number, and the number in the second box shows how many are taken away. Discuss the other examples on pages 74–76 before giving the students a set amount of time to complete the other exercises. Check their work as a class.

Recapitulation

Ask the students to look at page 77 and begin to work out the answers to the subtraction sums; they can work alone or in pairs and should write the answers in the spaces next to the sums.

Lesson 53 | Subtraction

78–80

Teaching objectives

• to practise subtraction
• to practise using a number line to do subtraction
• to explain how to write a simple subtraction problem as a sum

42 | **OXFORD**
UNIVERSITY PRESS

Learning outcomes

Students should be able to:

• complete simple subtraction sums correctly.

• use a number line to do subtraction.

• write a simple subtraction problem as a sum.

Materials required

a number line from 1–10 for each student; a set of 10 small items, e.g. pencils

Introduction

If necessary, begin by showing the students how to use their fingers to do subtraction sums. Ask them to hold up the fingers of one hand and then to 'take away' one finger. How many remain? Repeat this for other numbers of fingers.

Draw a number line on the board and give each student a number line.

Use the items you have prepared to demonstrate a subtraction sum, e.g. begin with seven pencils, give three of them away and then ask how many remain.

Write this as the sum $7 - 3 = 4$ on the board and then demonstrate how to do this using the number line. Make sure the students understand the steps—to begin at the original number and to move backwards one space for each item that is taken away in order to reach the new total. Practise this for other sums.

Student activity

Ask the students to open their books at page 78 and work through the exercises as a class. Ask them to look at page 79, explain the tasks and give the students a set amount of time to complete the other exercises before checking their work as a class.

Finally ask the students to look at page 80. Ask the students to study the illustration as you read the problem, and then ask them to fill in the first two boxes of the sum. Ask them to use the number line to find the correct answer and fill in the last box.

Recapitulation

Ask the students to complete the work on page 77 that they began in the previous lesson. Make sure the students have coloured pencils and explain that they should only colour the spaces where they have written 1 as the answer.

Unit 16 Counting to 100

Lesson 54	Counting to 100	page 81

Teaching objectives

- to revise and practise counting from 1 to 100

Learning outcomes

Students should be able to:

- recognise numbers to 100.
- count from 1 to 100.

Materials required

Note: before this lesson ask each student to bring to the class a number of readily available items, e.g. plastic bottle tops, pebbles, buttons etc.; each student should bring enough so that the total will be 100. For example, if there are 25 students in the class, each should bring 4 items, but the teacher should collect a few spares in case students forget or are unable to provide them.

a soft ball; 10 bundles of 10 items, e.g. pencils; number, word and picture flashcards for 60–100; a clear plastic bowl or a tray; a 10 square grid for each student made by copying the resource sheet on page 46; sets of student number, word and picture cards 10–100, wall chart for 1–100

Introduction

Play the ball game to practise counting from 1–50.

Use the bundles of ten items and the number flashcards to revise the numbers 60, 70, 80, 90, and 100. Write the number and written forms of the numbers on the board; ask students to volunteer to write other numbers between 50 and 100 e.g. 83, 77, etc. and explain how many tens and ones make up each number.

Place the bowl or the tray on a table and ask the students to bring the items they have collected and take turns to put them in the bowl / on the tray. As they do so, the students should count from 1–100. This activity will remind students of how large a number 100 is.

Student activity

Ask the students to open their books at page 81. Ask them to look at the grid and identify any patterns in the numbers in the horizontal and vertical rows of figures. Elicit that there are ten rows of ten numbers because a hundred is made up of ten groups of ten.

Give each student a grid and ask them to write in the numbers from 1–100 so that it is the same as the one on page 81.

Recapitulation

Give each student a set of number cards 10–100 and ask them to arrange them on their desk in order. When they have completed this, students can work in pairs to play one of the number card games.

Lesson 55	Months and days of the week	pages 82 and 83

Teaching objectives

- to explain that there are seven days in one week
- to introduce the names of the days of the week
- to explain that there are four weeks in one month
- to explain that there are twelve months in a year
- to introduce the names of the months of the year

Learning outcomes

Students should be able to:

- explain that there are seven days in one week.
- begin to say the names of the days of the week in order.
- explain that there are four weeks in one month.
- explain that there are twelve months in a year.
- begin to say the names of the months of the year in order.

Materials required

a calendar; a large sheet of paper divided into 12 columns, each headed with a name of one of the months; a smiley for each student; glue sticks; a record of the students' birthdays

Introduction

Ask some student how old they are and establish that they are $4\frac{1}{2}$ to $5\frac{1}{2}$ years old. Explain that a year is the amount of time between one birthday and the next, or that they will spend a year in a school class before moving to the next class. Because it is such a long period of time, it is broken down into twelve months. Ask if they know the names of any months, for example the month in which they were born. Continue to explain that months are divided into weeks and there are four weeks in a month, and that each week is divided into seven days. Ask if they know the names of any of the days of the week; explain that they come to school on week days but not on the two days that are called the weekend.

Student activity

Ask the students to open their books at page 82 and read the names of the days of the week. Try to relate each day to an activity that the students do on that particular day and ask them what they do on Saturdays and Sundays. Explain that the days of the week are always written with a capital letter at the beginning. Drill the names of the days with the whole class and then round the class.

Ask the students to look at page 83 and teach them the names of the months of the

year. Explain that January is the first month and December is the last month of the year, and that the names of the months are also written with a capital letter at the beginning.

Recapitulation

Fix the poster on the board. Give each student a smiley and ask them to write their name on it. Ask them to take turns to come to the board and glue the circle in the column headed with the month of their birth. Some students may not know the month of their birth, so refer to your list to help them. When the poster is complete, compare the numbers of students born in each month.

| Lesson 56 | What comes after / before? | pages 84 |

Teaching objectives
• to revise before and after
• to reinforce the names of the days of the week
• to reinforce the sequence of the days of the week

Learning outcomes

Students should be able to:
• use the terms before and after correctly to talk about the days of the week.
• recite the names of the days of the week in the correct order.

Materials required

a soft ball; paper and coloured pencils or crayons

Introduction

Revise the names of the months of the year with the students and then play the ball game to practise saying them in sequence.

Do the same for the days of the week. Ask the students to tell you their favourite day of the week, and explain why.

Student activity

Ask the students to open their books at page 84. Ask them to read the names of the days with you. Ask a student to tell you which day comes after Wednesday and then do the same for the other days of the week. It will be necessary to explain that the day after Sunday is Monday.

Do the same activity to teach the day that comes before a given day, and point out that the day before Monday is Sunday.

Recapitulation

Give the students paper and coloured pencils or crayons and ask them to draw a picture of what they do on their favourite day of the week.

Unit 18 Comparison: length and weight

Lesson 57	Comparing length	pages 85–87

Teaching objectives
• to revise the terms long and longer
• to help students compare items by length
• to explain how to measure the approximate length of a given object
• to help students measure lengths of familiar objects and places

Learning outcomes
Students should be able to:
• compare items by length using the terms long and longer correctly.
• measure the approximate length of a given object.

Materials required
pairs of items to compare by length, e.g. 2 pencils or rulers of different lengths, etc.

Introduction
Show the students a pair of objects you have prepared and ask them to tell you which of them is longer; repeat this with other pairs. Draw a line on the board and ask a student volunteer to draw a line that is longer.

Student activity
Ask the students to open their books at page 85, explain the task and give the students a set amount of time to complete the drawings. Check their progress as they work and give any necessary help.

At the end of the given time, ask the students to look at p 86 and demonstrate how the hand span, the pace and the foot can be used to measure length. Show the students how to count the number of spans as you measure e.g. the length and width of your desk. Which measurement is longer?

Recapitulation
Ask the students to look at page 87 and to work in pairs to make the given measurements. They should write the number of paces / spans in their books so that they can compare answers. Point out that students who are taller or who have longer legs or larger hands will have different results from those who are smaller.

Teaching objectives

• to revise the terms heavy, heavier, light, and lighter

• to help students compare items by weight

• to explain how to measure the approximate weight of a given object

Learning outcomes

Students should be able to:

• use the terms heavy, heavier, light, and lighter correctly to compare items by weight.

• explain how to measure the approximate weight of a given object.

Materials required

a variety of items to compare by weight, e.g. different fruits and vegetables; a balance with two pans like the one shown on page 87 of the student book; if this is unavailable, it should be possible to make a balance by hanging two plastic pots or plates from a stick which is hanging from a short cord as shown below; marbles, small stones and empty cans; a bottle of water; balances for student use if available
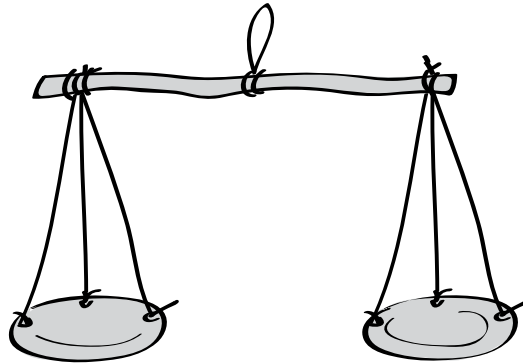
Introduction

Show the students a pair of objects you have prepared and ask them to tell you which of them is heavier. When they have chosen, place the items on the balance and demonstrate that the pan containing the heavier item will be lower than the one with the less heavy item. Explain that the pans will only be level if the two items are the same weight. Repeat this with other items.

Explain that fruit is usually measured in grams or kilograms, but if no weights are available, other items can be used to compare weights. Demonstrate this by placing a fruit on one side of the balance and some stones, marbles or cans on the other side of the balance. Show the students that two bananas will be balanced by more marbles / stones / cans, than only one banana.

Student activity

Ask the students to open their books at page 88 and work through the first two questions as a class. Now ask them to look at page 87 and ask them to help you weigh your bottle of water. Ask different students to weigh their own water bottles using stones / marbles / cans.

Recapitulation

If balances are available, ask the students to work in groups to compare the weights of different items and to make sentences comparing the weights using the terms heavy, heavier, light, and lighter.

If balances are not available ask students to make sentences comparing the weights of two items e.g. I think the ruler is lighter than the eraser, and use your balance to show whether the statement is true or false.

Lesson 59	Counting in 2s	pages 89–90

Teaching objectives

• to introduce the idea of counting in 2s up to 20

Learning outcomes

Students should be able to:

• count to 20 in 2s.

Materials required

sets of items that can be counted in twos, e.g. gloves, socks, slippers, etc.; flashcards of numbers 1–20; Blutak, masking tape, or similar adhesive material; a soft ball; a grid of 20 squares for each student made by copying the resource sheet on page 54; coloured pencils or crayons

Introduction

Show the students one of the pairs of items you have prepared, e.g a pair of socks, and ask them to tell you how many socks there are. Explain that it is usual to buy two socks together and that it is called a pair of socks; every pair of socks will be two items. Repeat this with e.g. a pair of gloves or slippers. Now show the students two or three pairs of socks and ask them to count how many socks there are altogether.

Fix the number flashcards on the board in order and ask the class to read the numbers 1–20. Turn over all the cards showing odd numbers so that only the even numbers can be read and ask the students to read those numbers. Explain that they are now counting in twos. Ask them to repeat the numbers several times and as they become confident, turn over some of the numbers so that they can count in twos without reading the numbers. Turn the flashcards back at the end of the activity so that students can use them for reference in the next part of the lesson.

Student activity

Ask the students to open their books at pages 89–90.

Discuss the objects at the top of page 89 and complete the two exercises as a class. Ask the students to look at page 90, explain the task and give them a set amount of time to complete them before checking their work as a class. Remind them to look at the numbers on the board if they need help.

Recapitulation

Play the ball game to practise counting in twos, or count in twos round the class.

Give each student a grid and ask them to write the numbers 1–20 in pencil, one number per square. When they have done this, ask them to choose a colour and use it to write over all the even numbers.
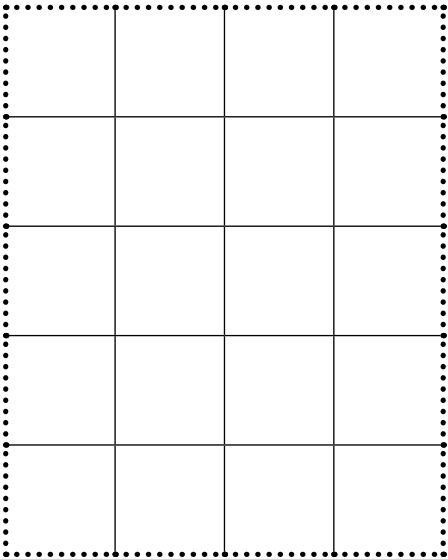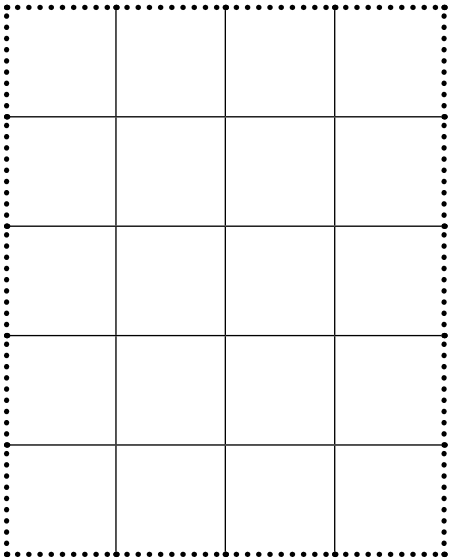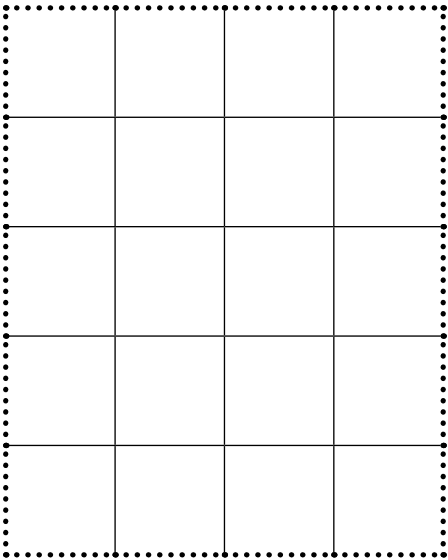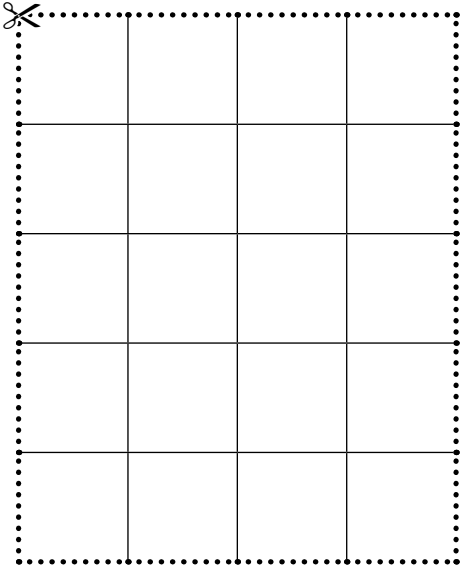
Teaching objectives

- to introduce the concept of money
- to introduce the one, two, and five rupee coins
- to help students begin to add and subtract sums of money

Learning outcomes

Students should be able to:

- explain what money is used for.
- recognise the one, two and five rupee coins.
- add and subtract sums of money.

Materials required

real 1, 2, and 5 rupee coins; empty food packages / toys to set up a shop in the classroom; price labels for each item in the shop; student sets of real or plastic 1, 2, and 5 rupee coins;

Introduction

Talk to the students about going to the shops with their parents and elicit that it is necessary to pay for the things we take from the shops, and for this we need to use money. Explain that the shopkeeper will add up the cost of the items we wish to buy and the customer has to give him / her that amount of money in order to take the things away.

Student activity

Ask the students to open their books at page 91 and look at the coins. Explain that these are some of the coins that are used in Pakistan and make sure that each student can see the amount of money stamped on each coin. Talk about the sizes and colours of the coins; which is largest / smallest? Which would enable you to buy more?, etc. Show the students the real coins and give some to groups of students so that they can feel them and examine them closely.

Ask the students to look at page 92. Talk about the objects in the shop and the prices. Ask the students which two coins would make Rs 6, etc. Work through the addition and subtraction sums together.

Recapitulation

Set up a classroom shop. Give each student some coins and help them to buy and sell items from the shop.

Unit 21 Fractions

Lesson 61 | Halves

Teaching objectives
• to demonstrate and explain that a whole object can be divided into two equal parts

Learning outcomes
Students should be able to:

• explain that a whole object can be divided into two equal parts.

Materials required
a selection of objects that can be cut into half, e.g. paper square / rectangle / isosceles triangle / circle, a potato / carrot / banana, etc.; scissors; knife; Plasticine and plastic knives if available; students sets of paper squares, rectangles and circles, scissors and glue; large sheets of paper

Introduction
Show the students the large paper square and elicit that it is one whole square. Fold the square in half and cut it into two. Elicit that you now have two parts of the square, but do not use the term half at this stage. Place one of the halves over the other so that the students can see that the two parts are the same. Place them side by side so they can see that the two parts can be joined together to make the whole square again. As you do this, explain that each part is one half of the whole square, and that they are exactly the same size and shape. Take a second paper square and cut it into two unequal parts. Establish that you have two more parts of the square, but demonstrate by placing them on top of each other, that they are not equal and are therefore not true halves.

Repeat this activity with the other shapes and objects, cutting some into two equal halves and others into two unequal parts so that the students will understand the meaning of half.

If you have solid objects such as apples, you can demonstrate that it is possible to make halves by cutting them either across the centre or from top to bottom; both will produce halves.

Student activity
Ask the students to open their books at page 93–94 and work through the exercises with the students.

Recapitulation
If Plasticine is available, give some to each student and ask them to make shapes and use the plastic knife to cut them into halves. Is it possible to cut them more than one way to make halves?

Give each student a large sheet of paper, glue, scissors, and some of the paper shapes. Show them how to fold the shapes and cut them into halves and then glue them on the large sheet of paper to make whole shapes again.

Unit 22 Review and assess

Before asking the students to complete these pages, make it clear that they are doing these tasks to help you decide where more teaching and learning is needed. No student should feel any sense of fear or failure.

Only complete as many tasks in one teaching period as you judge suitable for the students' levels of confidence.

Revision ideas are provided below to be used before each task or set of tasks.

Lesson 62	Sets of 10	pages 95

Teaching objectives

- to assess students' ability to count groups of ten
- to assess students ability to count in tens and ones
- to assess students' ability to record a number consisting of tens and ones in written form

Learning outcomes

Students should be able to:

- count groups of ten.
- count in tens and ones.
- record in written form a number consisting of tens and ones.

Materials required

sets of up to 10 items; sets of between 10 and 15 items; coloured pencils or crayons; sets of student cards

Introduction

Show the student a set of e.g. eight items and ask them to count them; establish that there are fewer than ten items in the set. Repeat this with a set of ten items and establish that it is one group of ten. Repeat this with two or three other sets of items and group the sets of ten together. Ask a student to write the number 10 on the board and review the fact that the numbers represent one set of ten and no ones.

Show the students a set of more than ten items e.g. 14, and ask a student to count them, separating the set of 10 from the 4 extra items. Ask a student to write the number on the board. Repeat this with other sets of items.

Student activity

Ask the students to open their books at page 95. Explain the tasks carefully and make sure each student has coloured pencils or crayons. Give the students as much time as they require to complete the tasks.

Recapitulation

Ask the students to work in groups of three or four, give them sets of student cards and show them how to play the memory card game (game no. 7).

Lesson 63 | Shapes   pages 96

Teaching objectives

- to assess students' ability to recognise two-dimensional shapes
- to assess students' ability to follow a key to colour different elements of a given picture
- to assess students' ability to count accurately a set of up to 35 items

Learning outcomes

Students should be able to:

- recognise a square, circle, rectangle and triangle.
- follow a key to colour different elements of a given picture.
- count accurately a set of up to 35 items.

Materials required

flashcards of the shapes square, rectangle, triangle and circle; green, yellow, red, and brown coloured pencils for each student; a drawing of about 25 small circles or triangles; a drawing of a green circle, yellow square, red triangle and brown rectangle; Blutak, a masking tape, or similar adhesive material

Introduction

Use the flashcards to revise the names of the shapes and talk about their distinguishing features.

Fix the drawing of the small circles on the board and explain that you need to count them. Elicit from the students that is it sensible to make a small mark in each circle as you count it in order to know which you have counted and thus avoid missing any of them or counting any of them twice. Demonstrate this as you count them together.

Student activity

Fix the drawings you have prepared on the board and ask the students to open their books at page 96. Explain the task and point out that your drawings will help the students to remember the colour key. Make sure each student has the correct coloured pencils and give them as much time as they need to complete the work.

Recapitulation

Sing one or two of the students' favourite number songs.

Teaching objectives
•   to assess students ability to add two numbers to make a given total

Learning outcomes
Students should be able to:

•   add two numbers together to make a given total.

Materials required
student number cards

Introduction
Draw on the board, (or on paper before the lesson) pairs of sets of items that will combine to make the same total, for example, if the chosen total is 7, pairs could be 1 and 6, 2 and 5, 3 and 4, 5 and 2, etc. These should be arranged as those on page 97 of the student book. Explain to the students that you have to match the pairs so that there will be a total of 7, e.g. apples, in each set. Work through each pair in turn, either counting on from the first number to find out which set will be its pair, or by trying each of the possibilities in turn until the correct total is reached. Draw lines between the pairs that combine to make the given total.

Student activity
Ask the students to open their books at page 97.

Explain that the task is the same as the one you have just completed on the board, but this time the total of each pair must be 9. Give them as much time as they need to complete the work.

Recapitulation
Ask the students to work in pairs or groups of 3 and give them sets of cards to play the memory card game (game no. 7).

| **Lesson 65** | Subtraction | page 98 |

Teaching objectives
•   to assess students' ability to subtract

Learning outcomes
Students should be able to:

•   do simple subtraction sums correctly.

Materials required

tape / CD / DVD / You Tube clip of *Ten green bottles*

Introduction

Draw on the board (or on paper before the lesson) two or three subtraction sums and answers like those shown on page 98 of the student book. Ask the students to give you a subtraction sentence for the first sum you have drawn, e.g. five stars take away two stars, and ask a volunteer to draw a line between the sum and the correct answer. Repeat this for the other sums you have drawn.

Student activity

Ask the students to open their books at page 98. Explain that the task is the same as the one you have just completed on the board and give them as much time as they need to complete the work.

Recapitulation

Sing *Ten green bottles.*

| **Lesson 66** | Time | page 99 |

Teaching objectives

• to revise the times of day

Learning outcomes

Students should be able to:

• identify the time periods morning, afternoon, evening and night.

Materials required

paper and coloured pencils or crayons

Introduction

Spend a few minutes revising the times of day by asking students to list some of the activities they do at different times of the day.

Student activity

Ask the students to open their books at page 99. Read each question and explain that you are going to say the words morning, afternoon, evening, and night after each question and they should raise their hands when you name the correct time of day.

Recapitulation

Ask the students to draw a picture showing what they do at a particular time of a day.

The animals went in two by two

The animals went in two by two, hurrah! hurrah!
The animals went in two by two, hurrah! hurrah!
The animals went in two by two, the elephant and the kangaroo
And they all went into the ark, for to get out of the rain.

The animals went in three by three, hurrah! hurrah!
The animals went in three by three, hurrah! hurrah!
The animals went in three by three, the wasp, the ant and the bumble bee
And they all went into the ark, for to get out of the rain.

The animals went in four by four, hurrah! hurrah!
The animals went in four by four, hurrah! hurrah!
The animals went in four by four, the great hippopotamus stuck in the door
And they all went into the ark, for to get out of the rain.

The animals went in five by five, hurrah! hurrah!
The animals went in five by five, hurrah! hurrah!
The animals went in five by five, they warmed each other to keep alive
And they all went into the ark, for to get out of the rain.

The animals went in six by six, hurrah! hurrah!
The animals went in six by six, hurrah! hurrah!
The animals went in six by six, they turned out the monkey because of his tricks
And they all went into the ark, for to get out of the rain

Five little speckled frogs

Five little speckled frogs
Sat on a speckled log
Eating some most delicious grubs
One jumped into the pool
Where it was nice and cool
Then there were four green speckled frogs.

The verse is then repeated, but with one fewer frog each time.
Alternatives include using the word bugs instead of grubs, and adding "Yum, yum!"
after that line.

One two three four five – once I caught a fish alive

One, two, three, four, five.
Once I caught a fish alive,
Six, seven, eight, nine, ten,
Then I let it go again.
Why did you let it go?
Because it bit my finger so.
Which finger did it bite?
This little finger on the right.

Hickory Dickory Dock,

Hickory Dickory Dock,
The mouse ran up the clock.
The clock struck one,
The mouse ran down,
Hickory Dickory Dock!

Hickory Dickory Dock,
The bird looked at the clock,
The clock struck two,
Away she flew,
Hickory Dickory Dock

Hickory Dickory Dock,
The dog barked at the clock,
The clock struck three,
Fiddle-de-dee,
Hickory Dickory Dock!

Hickory Dickory Dock,
The bear slept by the clock,
The clock struck four,
He ran out the door,
Hickory Dickory Dock!

Hickory Dickory Dock,
The bee buzzed round the clock,
The clock struck five,
She went to her hive,
Hickory Dickory Dock!

Hickory Dickory Dock,
The hen pecked at the clock,
The clock struck six,
Oh, fiddle-sticks,
Hickory Dickory Dock!

Two little dicky birds

Two little dicky birds sitting on a wall,
One named Peter, one named Paul.
Fly away Peter, fly away Paul,
Come back Peter, come back Paul!

One finger, one thumb

One finger, one thumb keep moving.
One finger, one thumb keep moving.
One finger, one thumb keep moving.
We all stay merry and bright.

One finger, one thumb, one arm,
keep moving.
One finger, one thumb, one arm,
keep moving.
One finger, one thumb, one arm,
keep moving.
We all stay merry and bright.

One finger, one thumb, one arm, one leg,
keep moving.
One finger, one thumb, one arm, one leg,
keep moving.
One finger, one thumb, one arm, one leg,
keep moving.
We all stay merry and bright.

One finger, one thumb, one arm, one leg,
one nod of the head, keep moving.
One finger, one thumb, one arm, one leg,
one nod of the head, keep moving.
One finger, one thumb, one arm, one leg,
one nod of the head, keep moving.
We all stay merry and bright.

One finger, one thumb, one arm, one leg,
one nod of the head, stand up sit down,
keep moving.
One finger, one thumb, one arm, one leg,
one nod of the head, sstand up sit down,
keep moving.
One finger, one thumb, one arm, one leg,
one nod of the head, stand up sit down,
keep moving.
We all stay merry and bright.

Ten green bottles

Ten green bottles hanging on the wall,
Ten green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be nine green bottles a-hanging on the wall.

Nine green bottles hanging on the wall,
Nine green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be eight green bottles a-hanging on the wall.

Eight green bottles hanging on the wall,
Eight green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be seven green bottles a-hanging on the wall.

Seven green bottles hanging on the wall,
Seven green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be six green bottles a-hanging on the wall.

Six green bottles hanging on the wall,
Six green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be five green bottles a-hanging on the wall.

Five green bottles hanging on the wall,
Five green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be four green bottles a-hanging on the wall.

Four green bottles hanging on the wall,
Four green bottles hanging on the wall.
If one green bottle should accidentally fall.
There'd be three green bottles a-hanging on the wall.

Three green bottles hanging on the wall,
Three green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be two green bottles a-hanging on the wall.

Two green bottles hanging on the wall,
Two green bottles hanging on the wall.
If one green bottle should accidentally fall,
There'd be one green bottle a-hanging on the wall.

One green bottle hanging on the wall,
One green bottle hanging on the wall.
If that green bottle should accidentally fall,
There'd be no green bottles a-hanging on the wall.

Three little kittens they lost their mittens

Three little kittens they lost their mittens,
  And they began to cry,
Oh, mother dear, we sadly fear
  Our mittens we have lost.
What! lost your mittens, you naughty kittens!
  Then you shall have no pie.
  Mee-ow, mee-ow, mee-ow.
  No, you shall have no pie.

The three little kittens they found their mittens,
  And they began to cry,
Oh, mother dear, see here, see here,
  Our mittens we have found!
Put on your mittens, you silly kittens,
  And you shall have some pie.
  Purr-r, purr-r, purr-r,
  Oh, let us have some pie.

One man went to mow

One man went to mow,
Went to mow a meadow.
One man and his dog,
Went to mow a meadow.

Two men went to mow,
Went to mow a meadow.
Two men, one man and his dog,
Went to mow a meadow.

Three men went to mow,
Went to mow a meadow.
Three men, two men, one man
  and his dog,
Went to mow a meadow.

Four men went to mow,
Went to mow a meadow.
Four men, three men, two men,
  one man and his dog,
Went to mow a meadow.
Went to mow a meadow.

Repeat the verse as far as ten men went to mob…

Baa baa black sheep

Baa baa black sheep, have you any wool?
Yes sir, yes sir, three bags full!
One for the master, one for the dame,
And one for the little boy who lives down the lane.

Five fat sausages

Five fat sausages sizzling in a pan
one went pop the other went bang.

Four fat sausages sizzling in a pan
one went pop the other went bang.

Three fat sausages sizzling in a pan
one went pop the other went bang.

Two fat sausages sizzling in a pan
one went pop the other went bang.

One fat sausage sizzling in a pan
one went pop the other went bang.

No fat sausages sizzling in a pan.

Five currant buns in a baker's shop

Five currant buns in the baker's shop,
Big and round with a cherry on the top.
Along came a boy with a penny one day,
Bought a currant bun and took it away.

Four currant buns in the baker's shop,
Big and round with a cherry on the top.
Along came a boy with a penny one day,
Bought a currant bun and took it away.

Three currant buns in the baker's shop,
Big and round with a cherry on the top.
Along came a boy with a penny one day,
Bought a currant bun and took it away.

Two currant buns in the baker's shop,
Big and round with a cherry on the top.
Along came a boy with a penny one day,
Bought a currant bun and took it away.

One currant bun in the baker's shop,
Big and round with a cherry on the top.
Along came a boy with a penny one day,
Bought a currant bun and took it away.

No currant buns in the baker's shop,
Nothing big and round with a cherry on the top.
Along came a boy with a penny one day,
"Sorry" said the baker, "no more currant buns today."

One, two,

One, two,
Buckle my shoe;
Three, four,
Knock at the door;
Five, six,
Pick up sticks;
Seven, eight,
Lay them straight:
Nine, ten,
A big fat hen;
Eleven, twelve,
Dig and delve;
Thirteen, fourteen,
Maids a-courting;
Fifteen, sixteen,
Maids in the kitchen;
Seventeen, eighteen,
Maids a-waiting
Nineteen, twenty,
My plate's empty.

Notes

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____