

Chapter 1 Number and numeration

Objectives

At the end of this chapter, pupils should be able to:

- 1 Sort and classify objects leading to idea of 1–5
- 2 Identify numbers of objects 1–5
- 3 Read numbers 1–5
- 4 Write numbers 1–5
- 5 Order numbers

Sorting and classifying objects leading to idea of 1–5

Make use of objects such as stones, stones beans, bottle tops, buttons, number cards etc.

Mixes the collection of objects and asks pupils to sort them according to types or groups.

Explain Unit 1 of your textbook and give them some exercises of Page 2 on use the workbook.

Give part of the exercise or workbook exercise as assignment.

Identification of numbers of objects 1–5

Guide pupils to form groups from the objects. Allow pupils to sort and classify the mixed collection by forming groups of objects. Give them part of exercise under Unit 2 Page 4 and the workbook as assignment.

Read numbers 1–5

Ask pupils to show one bottle top or counters etc, then two bottle tops to five. Ask them to read from 1–5. Give the exercise under Unit 3 Page 5 to 13 in the textbook and the workbook exercises as assignment. You can decide to give the exercises in the workbook as classwork.

Write numbers 1–5

Guide the pupils to write the numerals from 1 to 5 by tracing on pages 14–15 under Unit 4. Guide the pupils to use the workbook.

Write the numbers 1–5 on the board and allow them to write it in their notebooks for several times.

Ordering numerals 1–5

Lead pupils to write the numbers in order or arrange from lowest number to the highest number in their notebooks. Let them repeat it for some number of times so that they will have idea of ordering. Workbook can be used as homework.

Chapter 2 Whole number 0 (Zero)

Objectives

At the end of this chapter, pupils should be able to:

- 1 Recognise that the numeral 0 stands for nothingness.
- 2 Write the numeral 0.
- 3 Write the numerals 0–5

Recognition of numeral 0

Guide the pupils through Activity on page 23 and the examples on page 24.

Lead them to the concept of 0 (zero) by putting one stone in a bag, two stones in another bag etc. Ask them to remove the stones one by one till nothing is left.

Guide hem through the exercise on page 25 and the workbook.

Writing 0 (Zero)

Guide the pupils to trace and write 0 (zero) on page 26 under Activity Unit 2.

Lead them through the exercise on page 26 and the workbook.

Guide them to practice writing zero in their notebooks for some number of times.

Writing 0–5

Lead the pupils to writing of 0–5 by tracing Unit 3 page 27. Write 0–5 on the board and allow them to repeat it several times in their notebooks.

Guide them in spelling the numerals 0–5 in words form correctly.

Guide them through the exercise on page 28 and give the exercises in workbook as homework.

Chapter 3 Whole numbers 6–9

Objectives

At the end of this chapter, pupils should be able to:

- 1 Sort and classify objects leading to idea of 6–9.
- 2 Identify numbers 6–9.
3. Count and read numerals –9.
4. Write and order numbers 6–9.

Sorting and classifying

Guide pupils to mix the collection and sort out the balls or other objects (pebbles, bottle tops, buttons) together.

Lead them through Unit 1 under Activity page 30 of the textbook.

If there is related exercise in the workbook, lead the pupil through.

Identification of numbers 6–9

Guide pupils to classify each group of similar objects as follows

- a) count out five balls or similar objects
- b) add one ball to it

Lead the pupils to identify the numbers 6–9 through activities and the use of flash cards.

The flash cards should be numbered and can be arranged in random order.

Lead the pupils to identify each number when they are arranged in random order.

Lead them through Activity under Unit 2 page 32 of their textbook.

Give them homework from their workbook.

Counting and reading numbers 1–9

Write the numbers 1–9 on the board.

Read numbers 1–9 on the board.

Make use of the flash cards

Guide the pupils through Unit 3 page 33 of their textbook and give them the exercises 1–5. Part of the exercises in the workbook and part of the above exercises can be given as homework.

Writing 6–9

Lead pupils to write the numbers 6–9 by tracing the given exercise under Unit 4 page 36 of their textbook. Let them repeat the writing in their notebooks several times.

Introduce the flash cards by making the pupils to identify the numbers.

Lead them through exercises 1–2 page 36 of their textbook by asking questions.

Ordering numbers 6–9

Guide the pupils through page 37 under Unit 5 of their textbook.

Lead pupils to write the numbers in order of their magnitudes in their notebooks.

Use collection of objects (flash cards, counters etc) to illustrate by making them to arrange the flash cards in order of magnitude.

Lead them through exercises 1–3 pages 38–40 of their textbook.

Give them revision exercise on pages 41–42 of their textbook and exercises in the workbook as homework.

Chapter 4 Whole numbers 10

Objectives

At the end of this chapter, pupils should be able to:

- 1 Recognise 10 as a group.
- 2 Use idea of place value limited to tens and units.

Recognition of 10 as a group

Guide pupils through Unit 1 page 43 of your textbook and explain.

Use the flash cards on other numbered objects from 1 to 10 and ask the pupils to arrange in order of magnitude or from smallest to the largest.

Write the number 10 on the board.

Lead the pupils to write 10 in their notebooks for some number of times.

Lead the pupils to recognise 10 as a combination of 1 and 0.

Use of place value: tens and units

Guide the pupils through Unit 2 page 45.

Use the flash cards numbered from 1–20 (you can use other objects).

Lead the pupils to count 1–11, 1–12, 1–13 up to 20 and explain the tens and units making use of counters or balls or similar objects.

Give them exercise 1 of page 46 of your textbook as a classwork and part of some exercises in your workbook.

Give them exercise 2 of page 47 of your textbook as classwork.

Give the pupils the revision exercise of page 47 of your textbook as homework.

Chapter 5 Whole numbers 1–99

Objectives

At the end of this chapter, pupils should be able to

- 1 Identify and read numbers 1–99
- 2 Write numbers 1–99.
- 3 Order numbers 1–99.

Identify and reading numbers 1–99

Lead the pupils to read aloud numbers 1–99 by starting with the first 1–20, 21–30 etc.

Make use of Unit pages 49–58 of your textbook.

Ensure that reading should be in groups often (1–10, 11–20, etc) or 1–20, 21–40 etc)

Lead them through Exercise 1 page 52 and Exercise 2 of page 54 of the textbook.

This will also assist the pupils to identify the numbers (make use of flash cards with the numbers written on it).

Writing numbers 1–99

Place a number chart of 1–99 which is similar to that of page 59 under Unit 2 on the board.

Guide pupils to write the numbers.

Ensure that you break the numbers in groups (for easy identification).

Give the pupils some questions from Exercises 1–2 on pages 60–62 as classwork from the textbook.

Give the pupils exercises in the workbook as homework.

Ordering numbers 1–99

Guide the pupils to write numbers in order of magnitude. They should be able to identify the bigger numbers.

Lead them through Exercises 1–2 page 64 of the textbook.

Give the pupils Revision exercise 5 page 65 of the textbook and some exercises in their workbook.

Chapter 6 Fractions

Objectives

At the end of this chapter, pupils should be able to:

- 1 Identify one-half $\left(\frac{1}{2}\right)$ of a whole using concrete objects.
- 2 Identify one-quarter $\left(\frac{1}{4}\right)$ of a whole using concrete objects.
- 3 Identify the relationship between one-quarter $\left(\frac{1}{4}\right)$ and one-half $\left(\frac{1}{2}\right)$.

Identifying one-half $\left(\frac{1}{2}\right)$ of a whole

Guide pupils through **Unit 1 page 66** of the textbook.

Introduce practical examples by using teaching aids (oranges, apples, paper cuttings of shapes \rightarrow squares, rectangles, circles, etc)

Lead the pupils through Exercise 1.

Give the exercises in the workbook as homework.

Identifying one one-quarter $\left(\frac{1}{4}\right)$ of a whole

Guide pupils through **Unit 2 page 69** of the textbook. Introduce practical examples by using teaching aids stated above.

Lead the pupils through Activity of page 71 of the textbook.

Give the exercise on page 70 as a classwork, and the exercises in the workbook as homework.

Relationship between one-half $\left(\frac{1}{2}\right)$ and one-quarter $\left(\frac{1}{4}\right)$

Guide the pupils through **Unit 3 of page 72** of the textbook.

Engage the pupils in the **Activity of page 73** by guiding them to do it correctly.

Give the pupils **exercise 1 of page 74** as a classwork.

Give the exercises in the workbook and the **revision exercise 6 on page 77** of the textbook.

Chapter 7 Basic operations

Objectives

At the end of this chapter, pupils should be able to:

- 1 Add whole numbers with sum less than 5.
- 2 Add whole numbers with sum less than 10.
- 3 Add whole numbers with sum not greater than 18.
- 4 Add two digit whole numbers with sum not greater than 40.
- 5 Solve story problems involving addition.

Addition of whole numbers with sum less than 5

Lead the pupils through examples on pages 79, 82 and 83 of the textbook under Unit 1.

Introduce teaching aids (oranges, balls, number beads etc) for practical explanations.

Guide pupils to group the objects into ones, twos, threes and fours to form sum less than 5.

Give exercises 1, 2 and 3 of pages 80, 82 and 83 of the textbook.

Give exercises from the workbook as homework.

Addition of whole numbers with sum less than 10

Lead the pupils through examples on pages 84, 86 of the textbook under Unit 2.

Introduce teaching aids as stated previously for practical explanations.

Guide pupils to group the objects up to nine to form sum less than 10.

Give Exercises 1, 2 and 3 on pages 84, 86 and 87 respectively from the textbook.

Lead the pupils to how to use the number line to add by explaining the examples on page 88 of the textbook.

Guide the pupils through Exercise 4 of page 89 of the textbook.

Lead the pupils through Exercise 5 on Page 91 and allow them to try Exercise 6 on page 91 of the textbook on their own.

Addition of whole numbers with sum less than 18

Lead the pupils through examples and Exercise 1 of page 92 of the textbook.

Group object from 1 to 9 with sum not greater than 18 as stated previously. Allow the pupils to do the addition themselves.

Lead them through Exercises 2 and 3 of pages 92 and 94 of the textbook. Give part of the exercises as classwork.

Addition of 2-digit whole numbers with sum not greater than 40

Lead the pupils through examples on page 95 and page 96 of the textbook.

Group objects into tens, elevens, etc with pupils to do the additions with your help or guide them.

Give the pupils Exercises 2 and 3 of pages 96 and 97 of the textbook as classwork.

Give the exercises of the workbook as homework.

Chapter 8 Subtraction of whole numbers

Objectives

At the end of this chapter, pupils should be able to:

- 1 Subtract from whole numbers not greater than 9.
- 2 Subtract from whole numbers not greater than 18.
- 3 Subtract from whole numbers not greater than 40.
- 4 Solve story problems involving subtraction of whole numbers.

Subtraction of whole numbers not greater than 9

Lead the pupils through Activity of page 99 and the examples on page 100 of the textbook.

Give the pupils Exercise 1 of page 101 of the textbook.

Lead the pupils through examples on page 102 on how to use number line.

Guide the pupils through Exercises 2 and 3 of pages 103 and 104 as a classwork.

Subtraction of whole numbers not greater than 18

Lead pupils through exercises on page 105 of the textbook. Use objects (flash cards, counters etc.) to explain.

Guide pupils to group objects and take away some number of objects on their own to get the desired result.

Give the pupils classwork from above mentioned exercise.

Subtraction of whole numbers not greater than 40

Lead the pupils through activity and examples on page 108 under Unit 3 of the textbook.

Guide the pupils to count a group of objects and take away lesser number of objects from the group.

Lead the pupils to give real life activities which involves subtraction.

Give Exercise 1 of page 109 and Exercise 2 of page 111 as homework. The exercise in the workbook as homework.

Chapter 9 Algebraic processes: Open sentences

Objectives

At the end of this chapter, pupils should be able to:

- 1 Find the missing number in an open sentence involving addition.
- 2 Find the missing number in an open sentence involving subtraction.
- 3 Solve story problems involving open sentences.

Find the missing number in an open sentence involving addition

Revise addition of whole numbers with pupils and lead them through the exercise on page 114 of Unit 1 of textbook. Give them more of similar problems as revision.

Missing numbers in addition sentences

Guide the pupils through the examples on page 115.

Give Exercise 1 of page 116 and Exercise 2 of page 117 as classwork.

Using the number line (page 117)

Lead the pupils through the use of number line in counting (addition).

Guide the pupils through Exercise 3 of the page 117 of textbook and give them part of it as classwork.

Finding the missing number in an open sentence involving subtraction

Revise subtraction of whole numbers with pupils and lead them through the exercise on page 119 of Unit 2 of the textbook.

Give the pupils more of similar problems as revision.

Missing numbers in subtraction sentences

Guide the pupils through the examples on page 120.

Give Exercise 2 of page 121 in the textbook as classwork.

Word problems

Use objects (counters, flash cards, fruits, sweets etc) to introduce word problems on addition and subtraction.

e.g. I have 10 sweets and I gave my friend 6 sweets,

how many do I have left?

10 sweets – 6 sweets = [] etc.

Lead the pupils through the word problems on page 122 of the textbook.

Give the pupils the exercises in the workbook as classwork and the Revision exercise 9 of page 122 as homework.

Chapter 10 Mensuration and geometry

Money

Objectives

At the end of this chapter, pupils should be able to:

- 1 Recognise the different denomination of Nigerian coins and currency.
- 2 Add two or three coins and obtain the sum.
- 3 Shop and receive change.

Nigerian coins and notes

Lead the pupils through the pictures of the currency (coins and paper notes) on page 123 under Unit 1 of the textbook.

Show the pupils practical examples of various denomination of coins and paper notes.

Guide pupils through exercise of page 129 of the textbook.

Sum of two or three coins

Lead pupils through examples of page 124 under Unit 2. Use model coins and model paper currency to engage the pupils on activities of addition and subtraction (buying and selling).

Lead the pupils through Exercise 1 of page 125 and give them Exercise 2 of page 126 as classwork.

Shopping with ₦50 and receiving change

Activity of page 127 should be treated in the class orally by dividing the pupils into groups (customer and trader). Forming a small shop in the class and stuff it with some items and label the prices of each item will motivate the pupils.

Treat Exercise 1 of page 128 orally with the pupils in the class.

Exercise 2 of page 129 should be given as classwork.

Exercises in the workbook should be given as homework.

Chapter 11 Length

Objectives

At the end of this chapter, pupils should be able to:

- 1 develop the idea of length.
- 2 compare length of objects.
- 3 order similar objects according to their length.
- 4 identify the natural units of measuring length.
- 5 relate measuring length to their environment.

Idea of length

Lead pupils to the examples on page 132 of the textbook.

Teaching aids: pencils, sticks, strings, etc.

Use heights of pupils, distance covered by pupils in the classroom, etc.

Pupils should give examples of lengths in their environment.

Lead pupils through Exercise 1 of page 133.

Give pupils Exercise 2 of page 133 as classwork.

Comparing length

Guide pupils on how to use the terms longer than, shorter than, taller than to compare lengths.

Lead pupils through examples and Exercise 1 on page 134 of the textbook.

Lead the pupils through examples on page 135 and Exercise 3 of page 136 of the textbook.

Ordering length

Lead pupils through examples on page 137 and guide them through Exercise 1.

Give the pupils Exercise 2 on page 138 and Exercise 3 of page 139 as classwork.

Natural units of measuring length

Lead the pupils on how to measure with steps, hand spans, strides and foot.

Guide pupils to use hand spans to measure the length and breadth of the top of their tables and their teacher's table.

Use their strides to measure the length and diagonal of their classroom, etc.

Guide the pupils to realise that these method of measuring were used before the standard units.

Things that can be measured in our environment

Lead pupils to mention things that can be measured in their environment. e.g. length of plank, height of pupils in the class, distance between 3 or more houses, length of street, etc.

Give the pupils the exercises in the workbook and the revision Exercise 11 of page 142 as homework.

Chapter 12 Time

Objectives

At the end of this chapter, pupils should be able to:

- 1 have an idea of time for certain activities.
- 2 tell time to the hour.

The idea of time

Lead pupils by asking question on the time they go to bed, the time they wake up, the time the sun rises on sets, etc.

Introduce a cardboard clock with rotating hands to demonstrate the exact hours, going through activities of the day under Unit 1 page 143 of the textbook.

Telling the time to the hour

Lead the pupils through Exercise 1 of page 144 in the textbook.

Guide the pupils in drawing the hands and ensure that the minute hand is always longer than the hour hand.

Give Exercise 2, page 145 of the textbook as a homework.

Give the exercises in the workbook as a classwork.

Chapter 13 Weight

Objectives

At the end of this chapter, pupils should be able to:

- 1 identify heavy and light objects.
- 2 compare weights of objects using a simple balance.

Identify heavy and light objects

Lead pupils to concept of weight by using objects around (table, chair, books, etc).

Introduce the scale balance and demonstrate as shown in activity on page 147 of the textbook.

Give examples by comparing the weight of two objects.

Give Exercise 1 of page 148 of the textbook as classwork.

Comparing weights of objects

Lead the pupils through examples on page 149 of the textbook.

Give practical examples and give Exercise 2 of page 149 in the textbook as classwork.

Let workbook be homework.

Chapter 14 Three-dimensional shapes

Objectives

At the end of this chapter, pupils should be able to:

- 1 sort three-dimensional (3-dimensional) objects into cubes, cuboids, cylinders and spheres.
- 2 identify and name three-dimensional objects as cubes, cuboids, cylinders and spheres.
- 3 distinguish between cubes and cuboids.
- 4 name objects in the environment that are 3-dimensional shapes.

Sorting three-dimensional shapes

Lead pupils through the shape of objects on page 151.

Guide pupils to mention the names of the objects.

Lead pupils through question number 2 of Exercise 1 of page 152 to sort out solid objects and the ones which are similar.

Identifying and naming solids

Lead pupils to identify and name the shapes on page 153 by filling the table on page 154.

Guide the pupils through question number 3 and 4 of page 155

Objects in our environment that are three-dimensional shapes

Lead the pupils through activity of page 156.

Guide the pupils to identify the objects sorted as solid shapes and answer the questions.

Ask pupils to name some solid shapes in their environment.

Distinguishing between cubes and cuboids

Guide the pupils through activity of page 156 to use the objects or pictures in boxes A and B to identify the difference between cubes and cuboids.

You can give exercises in the workbook as classwork and the revision exercise 14 on page 158 as homework.

Chapter 15 Two-dimensional shapes

Objectives

At the end of this chapter, pupils should be able to:

- 1 sort shapes into squares, rectangles and circle.
- 2 identify and name two-dimensional shapes as squares, rectangle and circle.
- 3 distinguish between squares and rectangle.
- 4 identify shapes in our environment that are squares, rectangles and circles.

Sorting of two-dimensional shapes

Lead the pupils through the exercise on page 159 under Unit 1.

Guide the pupils to mention or identify similar shapes in their surroundings.

Introduce shapes, cut-outs of squares, rectangles and circles.

Guide the pupils through No. 3 of the above exercise.

Identifying and naming two-dimensional shapes as squares, rectangles and circles

Lead pupils through Activity 1, 2, 3 of page 161 of the textbook.

Give exercise of page 162 as classwork.

Distinguish between squares and rectangles

Guide pupils through Unit 3 of page 163 of the textbook.

Lead the pupils to discover the distinguishing features of square, rectangle and circle.

Give the pupils exercise of page 164 of the textbook as classwork.

Identifying shapes in our environment that are squares, rectangle and circles

Guide pupils to identify and mention shapes (squares, rectangle and circles) in their environments.

Lead the pupils through exercise of page 165 and the revision exercise of page 166 of the textbook.

Give the exercises in the workbook as classwork.

Chapter 16 Everyday statistics

Data collection and presentation (Pictograms)

Objectives

At the end of this chapter, pupils should be able to answer questions when information is represented by pictures.

lead pupils through Exercise 1 of page 167 of the textbook.

Guide pupils to mention ages, months or days, group them according to months, or days or years and present it as a data. You can use other information's like heights, etc.

Encourage the pupils to generate questions and how to collect data on their own.

Give Exercise 2 and 3 of page 168 and 169 as a classwork and exercises in the workbook as homework.