Teaching Guide

NEW COUNTDOWN

ENHANCED BLENDED EDITION

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide. Oxford is a registered trade mark of
Oxford University Press in the UK and in certain other countries

Published in Pakistan by
Oxford University Press
No. 38, Sector 15, Korangi Industrial Area,
PO Box 8214, Karachi-74900, Pakistan

Third Edition (Enhance Blended) published in 2026

ISBN 9786275227625

PREFACE

Early childhood experiences are the main determinants for future achievement. During the first five years, the brain is highly sensitive to environmental influences. These include quality of interaction with peers, teachers, and family members and whether a stimulating environment that supports cognition, language, and executive functioning is provided to children.

The new New Countdown series for pre-primary: Pre-nursery, Nursery and Kindergarten, has been revamped with new activities, games, and flash cards – to provide pupils with a solid foundation in mathematics and prepare them for primary. The new edition follows a structured teaching approach to nurture cognitive development.

This series aims to nurture physical, social, emotional, and intellectual development with the aim to transition from rote learning to hands-on, play-based activities – in alignment with the National Curriculum of Pakistan. The curriculum is structured to develop learning through purposeful activities and content curated for differentiated learning styles. The activities are carefully designed with research-backed practices to develop knowledge, skills, confidence and pro-social behaviour.

Effective Pedagogy in Mathematics

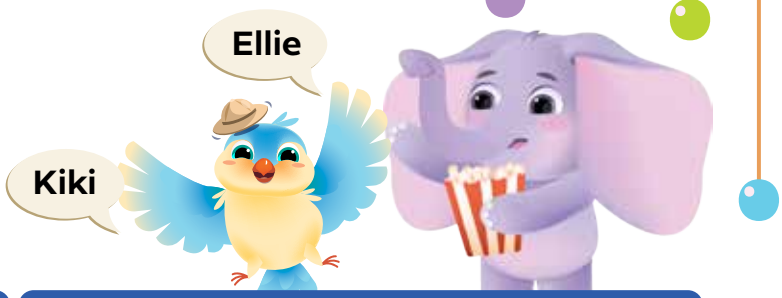
- Provide a stimulating environment with diverse learning opportunities to encourage holistic development
- Pupils learn through play, observation, and expression to form familiar and new experiences
- Encourage positive contribution, exploration, and well-being
- Facilitate pro-social behaviour – respect for others, fairness, and justice

Therefore, in alignment with the core competencies in the national curriculum, the books have been structured to facilitate visual, auditory, and tactile-kinaesthetic development. Teacher's notes have been provided to equip pupils with the skills they need.

The pattern followed throughout the series ensures development in key areas of early childhood development, with emphasis on number sense, quantity, and operations, measurement, comparison, ordering, geometry, and spatial sense. The objective is to foster success, build confidence and develop positive self-image through movement-based, language-rich, play-based and narrative-led pursuits.

Scope and Sequence

UNIT	NAME	STUDENT LEARNING OUTCOMES
1 Page 2	**Numbers: Part One**	• Count, identify and trace numbers 1-5 • Recognise that an entire set of objects is more than its parts • Apply counting to their daily life activities
2 Page 19	**Shapes**	• Identify and name 2-D or familiar shapes e.g. circle, square, triangle, oval, rectangle, etc. • Compare the shape and size of objects • Order shapes from smallest to largest (e.g. order of various circle sizes)
3 Page 31	**Patterns**	• Recognise patterns in the environment.
4 Page 35	**Numbers: Part Two**	• Count objects saying the number names in the standard order, pairing each object with one and only one number name • Count backwards from 5-1 • Identify nothing equates to zero in quantity • Count and make sets of up to 10 objects • Count at least ten objects with one-to-one correspondence • Identify the number that comes before or after a given number up to 10
5 Page 45	**Ordinal Numbers**	• Use ordinal numbers 1st, 2nd, and 3rd to indicate position in a sequence, e.g. I put the blue ball third • Order and sequence numbers



1 Numbers: Part One

Student Learning Outcomes	Suggested time: 8 Lessons
• Count, identify, and trace numbers 1-5 • Recognise that an entire set of objects is more than its parts • Apply counting to their daily life activities	

NUMBERS

Manipulatives

- Toys, books, and blocks
- Chart paper with hollow numbers 1-5 (5 in each row)
- 5 finger paints
- Playdough
- Sand trays
- Number cards 1-5

Methodology

The lesson begins with contextualised play: a picnic birthday party at the park with Buzzy the bumblebee. Pupils are engaged through a story that introduces numbers naturally in a familiar and fun setting. Counting activities use realia, classroom objects, and story elements from the textbook illustrations. Structured peer support (buddy teams) ensures all pupils participate.

Pre-emptive Pitfalls

Some pupils may struggle with attention to detail in busy illustrations. To prevent overload, use larger fonts, clear labelling, and structured instructions. Repetition of counting with finger actions and objects will help retention. Pupils with slower recall can be paired with peers for support so that they feel included and confident.

Main Activity

The teacher sets the scene by saying: *"We are having a picnic birthday party at the park. Buzzy the bumblebee is here to play with you. But first, we need to help her set everything up. Can you count and sort the birthday items by numbers, shapes, and colours?"*

Pupils are then directed to observe the large picture on page 2 and asked to describe what they see. The teacher prompts them to identify balloons, gifts, candles, and fruits while encouraging them to count aloud together.

Children are first asked to share which numbers they already know. Following this, each child is invited one by one to participate in an activity where they collect a single object from different parts of the classroom. For example, the teacher might say, "[Student 1], please bring one book from that corner," or "[Student 2], can you get one block from the shelf?" and "[Student 3], please bring one toy from the table." This hands-on and participatory approach reinforces the concept of the number "one" in a concrete, engaging, and memorable way.

Pupils are directed to open their books to page 2, where the teacher initiates guided questioning to draw their attention to details in the illustration. They are asked to count the balloons and name their colours, count the gifts placed on the picnic table, and count the candles on the cake. The teacher further prompts them to identify additional items, such as the fruit basket and drinks. Pupils first respond by counting aloud together as a group, and then take turns counting individually. This progression helps them build both confidence and accuracy in oral counting responses.

Exposition

The teacher narrates: "Buzzy is at the park, ready to welcome her friends and set the table for the birthday party." The teacher then guides the discussion with prompts such as, "There is Buzzy, the bumblebee. There is a birthday cake with candles—count them. I see three candles. There are gifts on the table. How many? Yes, three gifts. Look at the balloons—count and say their colours. There are five balloons: blue, pink, purple, red, and orange. Now look at the basket. Which fruits do you see? Cherries, bananas, an apple, and even a sandwich and a bottle of water."

Textbook Pages:

Page 2-3

Multi-sensory Learning Stations

Tactile/Kinaesthetic: Pupils use blocks, counters, or toys to create sets of one, two, and three. They place them on mats labelled with numbers.

Auditory: Teacher plays counting songs and rhymes (*One Little Finger, Five Little Ducks*) and encourages children to join in.

Visual: Pupils explore the textbook illustrations and participate in a "number hunt" where numbers 1–3 are displayed on flash cards around the classroom for children to find and match with objects.

Plenary

The teacher reviews by asking: *"Can you find one object in the classroom? How about two? How about three?"* Children share their examples with the group. The session ends with a counting song to reinforce the day's learning.

Number I

Student Learning Outcome

- Recognise, trace, and count the number I in various contexts.

Manipulatives

- Chart paper with hollow number I
- Oil paints
- Classroom objects for counting and pairing
- Mini-whiteboards/paper
- Sand trays/playdough
- Flash cards

Methodology

Demonstration → group tracing → independent practice.

Objective

Students will learn how to correctly form, trace, and identify the number I through board work, group activities, air tracing, and real-life connections.

Learning Curve

Board demonstration → group tracing on chart → air practice and reinforcement → workbook pages.

Pre-emptive Pitfalls

- Incorrect pencil grip (too tight/too loose)
- Confusing one with other numbers
- Skipping oral counting while tracing

Main Activity

1. **Board Demonstration (Step I):** Teacher demonstrates drawing number I on the board: "Begin at the top, then drag your finger downward along the dotted lines to the end."
2. **Group Tracing (Step 2):** Chart paper with hollow I is pasted on the board at a level children can reach. Pupils are divided into groups of five. Each group takes turns tracing the number I with oil paint, one student at a time.
3. **Air Practice (Step 3):** After everyone's turn, reinforce the concept by asking children to practice drawing number I in the air until proficient.

4. **Pencil Holding:** Teacher models the "pinch and flip" method. Explain the alligator mouth analogy (thumb and index finger as the alligator's mouth). Model correct grip gently.
5. **Real-life Connection:** Teacher highlights examples: "There is 1 Sun, 1 Moon, 1 Earth, 1 nose, 1 tongue."
6. **Textbook Integration:**

- **Page 4:** Pupils trace number 1 while saying "one." Teacher holds up one finger and prompts: "How many balloons is Buzzy holding?"
- **Page 5:** Pupils count and trace while repeating sentences: "There is 1 gift/sun/balloon/cake/tree."
- **Page 6:** Teacher places classroom objects in pairs, explains what a pair means, and circles one object from each pair (apples, mangoes, bananas, strawberries). Pupils repeat aloud: "1 apple, 1 mango..."
- **Page 7:** Teacher draws 4 flowers, 1 sun, and 2 trees. Pupils identify which object is "one" and circle it.

Textbook Practice Pages

Pages 4–7

Exposition

The teacher revisits all examples from the board and books, asking pupils: "Which objects do we have only one of?" Pupils identify and respond orally.

Multi-sensory Learning Stations

- **Tactile/Kinaesthetic:** Sand trays or playdough for tracing.
- **Auditory:** Number songs and chants.
- **Visual:** Flash cards for number recognition and counting.

Mastery

- Pupils answer prompts:
  - **"Name/Draw 1 object from this classroom."**
  - **"Name/Draw 1 fruit/animal you like."**
  - **"Name/Draw your favourite toy/food."**
- Group activity: Each child brings one object (e.g., 1 toy, 1 fruit). They state: "I have 1 ball," and then describe the object the person on their left has: "He/She has 1 book."

Plenary

Teacher displays pictures featuring objects in the quantity of 1 and asks pupils to point them out.

Number 2

Student Learning Outcome

- Recognise, trace, and count the number 2 in various contexts.

Manipulatives

- Flash cards for numbers 1 and 2
- Classroom objects (books, toys, fruits) in sets of 2
- Chart paper / board
- Mini-whiteboards
- Sand trays / playdough
- Flash cards with pairs and groups

Methodology

Recap → Demonstration → Guided practice → Independent practice

Objective

Students will recognise and trace number 2, identify sets of two in real life, and differentiate between pairs and groups.

Learning Curve

Recall number 1 → Introduce 2 with objects → Trace number 2 → Apply to real-life examples and textbook pages.

Pre-emptive Pitfalls

- Confusing "pair" with "group"
- Tracing 2 incorrectly (curve direction mistakes)
- Forgetting sequencing after 1

Main Activity

1. **Recap:** Use flash cards for number 1, ask pupils to trace in the air, and identify objects with 1 item.
2. **Introduction of 2:** Place books in pairs on the desk. Show 1, then add another: "Now I have 2 books." Pupils repeat.
3. **Real-life Connection:** Discuss parts of the body that come in 2s: eyes, ears, hands, legs, etc. Ask: "How many wheels does a bicycle have?"
4. **Same or Different:** Place 2 similar objects (a pair) and 2 different objects (a group). Elucidate difference between pair and group.

5. **Tracing Number 2:** Demonstrate on board: curve down left, then to the right. Pupils repeat.

6. **Textbook Integration:**

- **Page 8:** Pupils trace number 2, holding up 2 fingers. Count Buzzy's balloons.
- **Page 9:** Count cherries, trees, ducklings, flowers, bananas. Pupils repeat: "There are 2 ..."

Textbook Practice Pages

Pages 8–9

Exposition

Teacher revises: "Which number comes after 1? What are things we see in 2s?" Pupils respond with examples from the class.

Multi-sensory Learning Stations

- **Tactile/Kinaesthetic:** Sand trays/playdough for tracing.
- **Auditory:** Number songs.
- **Visual:** Flash cards/pictures of objects in 2s (gloves, socks, bicycles).

Mastery

- Pupils name/draw 2 objects in class, 2 fruits, 2 animals, 2 toys.
- Group work: Each pupil brings 2 objects. Say: "I have 2 balls." Next pupil: "He/She has 2 books."

Plenary

Teacher shows pictures of objects/people in quantities of 2. Pupils describe them.

Number 3

Student Learning Outcome

- Recognise, trace, and count the number 3 in various contexts.

Manipulatives

- Flash cards 1–3
- Toys in sets of 3
- Sand trays / playdough
- Flash cards with objects in 3s
- Mini-whiteboards

Methodology

Recap → Demonstration → Guided practice → Independent practice

Objective

Students will learn to form, trace, and identify number 3 in the classroom and real-life examples.

Learning Curve

Recall 1 & 2 → Introduce 3 with objects → Trace number 3 → Apply to real-life & textbook pages.

Pre-emptive Pitfalls

- Incorrect curve formation for 3
- Forgetting number sequencing (1–2–3)
- Miscounting sets of 3

Main Activity

1. **Recap:** Pupils air-trace 1 & 2 and identify classroom objects in those quantities.
2. **Introduction of 3:** Teacher places toys one by one on desk. Pupils answer how many after each addition. “Now I have 3 toys.” Pupils repeat.
3. **Tracing Number 3:** Teacher demonstrates: two downward curves. Pupils repeat.

4. Textbook Integration:

- **Page 12:** Trace number 3, holding up 3 fingers. Count Buzzy's balloons.
- **Page 13:** Count leaves, ribbons, lily-pads, flowers, frogs. Pupils repeat: "There are 3 ..."

Textbook Practice Pages

Pages 12–13

Exposition

Teacher revisits: "What comes after 2? Where do we see 3 things together?" Pupils answer from classroom surroundings.

Multi-sensory Learning Stations

- **Tactile/Kinaesthetic:** Sand trays/playdough.
  - *Treasure Hunt*: Group leaders collect 3 objects. First back wins.
  - *Number Sequence Game*: Pupils with flash cards 1–3 arrange in correct order.
- **Auditory:** Number songs.
- **Visual:** Flash cards/pictures of objects in 3s; outdoor observation walk for 3s.

Mastery

- Pupils name/draw 3 objects in classroom, 3 fruits, 3 animals, 3 toys.

Plenary

1-2-3 movement game: Jump once, turn twice, hop thrice.

NUMBER 4

Student Learning Outcomes

- Count and identify sets of up to 4 objects.
- Trace and recognise number 4.
- Relate number 4 to real-life examples.

Manipulatives

- Flash cards
- Classroom furniture
- Pictures of animals
- Sand trays
- Playdough
- Chart paper

Methodology

Introduce 4 with classroom objects and real-world connections (animals, seasons, legs of furniture). Guide pupils in tracing the digit with clear steps.

Objective

Pupils will count, trace, and recognise number 4, and connect it with familiar real-life sets.

Learning Curve

Students progress from sets of 1–3 to recognising and sequencing 4.

Pre-emptive Pitfalls

Pupils may draw 4 incorrectly (e.g., closed box shape). Emphasise stroke order: down, across, down.

Main Activity

Place 4 objects on desk, count aloud, and ask pupils to identify real-life things in 4s (seasons, legs of animals). Demonstrate tracing of 4: down, across, down. Pupils practise on sand trays, whiteboards, and in textbook.

Textbook Practice Pages

Page 16: Count Buzzy's 4 balloons.

Pages 18–19: Make sets of 1–4 objects. Tick boxes with 4 objects; count scattered objects in groups of 4.

Exposition

Reinforce: “There are 4 apples.” Show how 4 fits into sequence after 3.

Multi-sensory Learning Stations

- **Tactile**: Sand trays; playdough activity (make 4 objects); 10-square grid jumping game.
- **Auditory**: Sing number songs.
- **Visual**: Flash cards of 4 objects, collage activity with hollow 4 on chart paper, number puzzles, “Spot the 4.”

Plenary

Ask a pupil to fetch 4 objects. Pupils share 4 favourite birthday foods.

NUMBER 5

Student Learning Outcomes

- Count and identify sets of up to 5 objects.
- Trace and recognise number 5.
- Sequence numbers 1–5.

Manipulatives

- Flash cards
- Number line
- Bingo sheets
- Sand trays
- Playdough

Methodology

Use objects and sequencing activities to reinforce counting up to 5. Demonstrate tracing step-by-step.

Objective

Pupils will count and trace number 5, recognise sets of 5, and order numbers 1–5.

Learning Curve

From recognition of earlier numbers to sequencing and writing up to 5.

Pre-emptive Pitfalls

Some may confuse 5 with 2. Stress stroke order: down, curve, line across top.

Main Activity

Recap numbers 1–4. Place 5 objects on desk and count together. Ask "What comes after 4?" Demonstrate tracing: start at top left, downward line, curve, line across top.

Textbook Practice Pages

Page 20: Count Buzzy's 5 balloons, trace number 5.

Exposition

Reinforce sequencing: 1, 2, 3, 4, 5. Spot objects in sets of 5 around the classroom.

Multi-sensory Learning Stations

- **Tactile**: Sand trays; number line jump activity in groups of 5.
- **Auditory**: Number songs with 5.
- **Visual**: Flash cards, sets of 5; Number Bingo in groups.

Plenary

Flash cards 1–5 jumbled; pupils sort into order. Ask sequencing questions.

MISSING NUMBERS

Student Learning Outcomes

- Identify missing numbers 1–5.
- Sequence numbers before and after.

Manipulatives

- Number blocks
- Flash cards
- Number train
- Chart
- Mini-whiteboards

Methodology

Use number blocks, flash cards, and sequencing to teach missing numbers. Encourage participation through board work and group activities.

Objective

Pupils will identify missing numbers, recognise sequencing, and say which number comes before and after.

Learning Curve

From filling in single missing numbers to recognising multiple missing numbers in sequence.

Pre-emptive Pitfalls

Children may struggle with "before" numbers. Provide concrete objects and repeated guided practice.

Main Activity

Place blocks 1–5 on desk; hide one with sticky note. Ask "Which number is missing?" Call 5 pupils with flash cards 1–5; ask one to turn around and have class identify missing number. Increase challenge: hide two, three, or four numbers. Write sequences with gaps on board; pupils fill in answers on mini-whiteboards.

Textbook Practice Pages

Page 24: Revise tracing numbers 1–5 with air-tracing before completing exercise.

Exposition

Reinforce sequencing with before/after prompts.

Multi-sensory Learning Stations

- **Tactile**: Pupils arrange blocks/tiles to fill missing numbers.
- **Auditory**: Chant 1–5, pausing for pupils to call missing number.
- **Visual**: Number charts with blanks.

Plenary

Call out a sequence with gaps and ask pupils to say missing number, and what comes before/after.

BACKWARD COUNTING 5–1

Student Learning Outcomes

- Count backwards 5–1.
- Identify what comes before a number.

Manipulatives

- Flash cards
- Number blocks
- Charts
- Picture books

Methodology

Introduce backward counting with number blocks, flash cards, and real-life links (countdowns). Practise tracing and sequencing 5–1.

Objective

Pupils will count backwards 5–1, recognise the sequence, and connect to real-life countdowns.

Learning Curve

From counting forward to counting backwards, linking sequencing concepts.

Pre-emptive Pitfalls

Pupils may revert to forward counting. Scaffold learning with repeated choral practice and visual aids.

Main Activity

Show flash cards 1–5 and ask, "What comes after?" Then explain counting down. Arrange blocks in reverse order, read aloud 5–1. Ask: "What comes before 5? Before 4?" On Page 25, guide pupils through Buzzy's backward journey from beehive (5) to flowers 4–1, tracing arrows 5–1. Provide one-on-one help where needed.

Textbook Practice Pages

Page 25: Backward counting tracing activity with Buzzy and flowers.

Exposition

Explain real-life countdowns: days left before an event, or "3-2-1 Go!" before races.

Multi-sensory Learning Stations

- **Tactile**: Line up objects 5–1 and remove one at a time.
- **Auditory**: Backward number chant with claps.
- **Visual**: Countdown charts, animations of objects disappearing.

Plenary

Reinforce with flash cards or charts: pupils count 5–1 confidently, answering "What comes before...?"

TEACHER'S REFLECTION

What impact did the teaching strategy have on students' learning? How effective was the approach in achieving the lesson objectives?

2 Shapes

Student Learning Outcomes	Suggested time: 6 Lessons
• Identify and name 2-D or familiar shapes e.g. circle, square, triangle, oval, rectangle, etc. • Compare the shape and size of objects • Order shapes from smallest to largest (e.g. order of various circle sizes)	

CIRCLE

Manipulatives

- Large and small circle cut-outs
- Baskets
- Playdough
- Sand trays
- Chart paper

Methodology

Use large and small cut-outs, group activities, and real-life connections to introduce the circle. Scaffold pupils from recognition to tracing, and finally to identifying circles in real-world settings.

Objective

By the end of the lesson, pupils will be able to identify circles, describe their features, trace circles using multiple media, and relate the shape to everyday objects.

Learning Curve

Pupils progress from seeing the circle as an abstract cut-out to recognising it in real-life contexts (classroom, playground).

Pre-emptive Pitfalls

Some children may confuse circles with ovals or other curved shapes. Ensure repeated emphasis: “A circle is round, no sides, no corners.” Provide one-on-one support for struggling learners.

Main Activity

Begin with introduction: *"Today, we are going to learn about shapes. Shapes are all around us. Everything you see has a shape. Let's help Buzzy find shapes at the park."* Show page 26 and ask: *"What can you see? Can you spot a shape you already know?"*

Hold up a large cut-out of a circle: *"This is a circle. Everyone say it with me: circle."* Write **CIRCLE** on the board, spell it out letter by letter, and have pupils repeat after you. Emphasise: *"A circle is round. It has no sides and no corners."*

Sort pupils into groups of 4–5. Hand each group a basket of mixed shape cut-outs. Ask: *"Can you find all the circles?"* Let groups sort and count their circles, then share answers.

Transition to kinesthetic learning: *"Let's draw a circle in the air with our fingers. Round and round."* Demonstrate on the board. Distribute sand trays or playdough. Pupils practise drawing or forming circles. Circulate, praising effort: *"Yes, that looks like a round circle!"*

Finally, conduct a "Shape Hunt." Take pupils outside or around the classroom: *"Can you find something shaped like a circle? A clock? A plate? A button?"* Pupils point or collect examples.

Textbook Practice Pages

Page 26: Pupils observe the scenery. Teacher guides: *"Point to something shaped like a circle. What is it? Yes, the sun. What else? Yes, a ball."* Pupils circle objects in the textbook.

Exposition

Reinforce: *"A circle is round. It has no corners, no sides. We see circles in clocks, wheels, and plates."*

Multi-sensory Learning Stations

- **Tactile/Kinaesthetic**: Sand trays and playdough for tracing circles.
- **Auditory**: Circle rhymes or songs (e.g., "Round and round we go").
- **Visual**: Cut-outs, flash cards, real-life photos of circular objects.

Plenary

Ask pupils to look again at page 26 and identify at least two circles. Conclude with a quick chant: *"Round and round, circle found!"*

SQUARE

Student Learning Outcomes

- Identify and name the square as a 2D shape.
- Recognise characteristics of a square (4 equal sides, 4 corners).
- Relate squares to real-life objects.

Manipulatives

- Large/small square cut-outs
- Baskets
- Blocks
- Books
- Sand trays
- Playdough

Methodology

Use cut-outs, group sorting, and shape-hunting activities to build concept knowledge. Scaffold learning from definition → tracing → real-life connection.

Objective

By the end of the lesson, pupils will identify and describe squares, trace them confidently, and recognise them in their environment.

Learning Curve

Pupils connect the abstract concept of a square with real-world examples like books and photo frames.

Pre-emptive Pitfalls

Pupils may confuse squares with rectangles. Reinforce: "All 4 sides of a square are the same length."

Main Activity

Begin with recap: *"Who remembers yesterday's shape? Yes, circle! Show me air-tracing a circle. Did anyone find circular objects at home?"* Call on volunteers.

Introduce today's shape: hold up a large square cut-out: *"This is a square. Say it with me: square."* Write **SQUARE** on the board, spell it aloud, and have pupils repeat.

Explain: *"A square has 4 sides. Let's count: 1, 2, 3, 4. It also has 4 corners. All sides are the same length."* Point to corners and sides as you describe.

Group sorting activity: give mixed cut-outs. Ask: *"Find the squares. How many did your group find?"* Each group shares results.

Air tracing: demonstrate on board: *"Down, across, up, across — square."* Pupils copy in the air. Then practise in sand trays or with playdough (forming squares).

Conduct a "Shape Hunt": *"Look around. Can you see something square? Yes, the window! What about this block? Let's clap for [Student] who found a square."*

Textbook Practice Pages

Page 26: Pupils identify and circle square-shaped objects.

Exposition

Reinforce: *"A square has 4 sides and 4 corners. All sides are equal."*

Multi-sensory Learning Stations

- **Tactile**: Playdough squares, tracing in sand trays.
- **Auditory**: Square chant: *"4 sides, 4 corners, all the same — square!"*
- **Visual**: Real-life photos (books, frames, tiles).

Plenary

Return to page 26: *"Can you find one more square here?"* Conclude with: *"4 sides, 4 corners — it's a square!"*

TRIANGLE

Student Learning Outcomes

- Identify and name the triangle as a 2D shape.
- Recognise characteristics of a triangle (3 sides, 3 corners).
- Relate triangles to everyday objects.

Manipulatives

- Large/small triangle cut-outs
- Baskets
- Sand trays
- Playdough
- Picture flash cards

Methodology

Introduce triangles using cut-outs, group sorting, air tracing, and shape hunts.

Objective

By the end, pupils will confidently recognise, describe, and trace triangles, and identify triangular objects.

Learning Curve

Pupils extend from squares to identifying shapes with fewer sides and corners.

Pre-emptive Pitfalls

Pupils may confuse triangles with irregular 3-sided figures. Emphasise: "A triangle always has 3 sides and 3 corners."

Main Activity

Start with recap: *"Who remembers yesterday's shape? Yes, square! Show me a square in the air. Did anyone see squares at home?"*

Introduce triangle: show a large cut-out. *"This is a triangle. Say it with me: triangle."* Write TRIANGLE on board, spell aloud.

Explain: *"A triangle has 3 sides. Let's count: I, 2, 3. And 3 corners. Let's count corners together."*

Group sorting: mixed cut-outs distributed. *"Can you find the triangles? How many are in your basket?"*

Air tracing: demonstrate: *"Down, across, up — triangle."* Pupils copy in the air. Then practise in sand trays and playdough.

Shape Hunt: *"Can you find a triangle in this classroom? Maybe on a sign, or on the roof pattern?"* Encourage pointing and applause.

Textbook Practice Pages

Page 26: Identify and circle triangle objects.

Exposition

Emphasise: *"A triangle always has 3 sides and 3 corners. Pizzas, pie slices, and traffic signs are triangles."*

Multi-sensory Learning Stations

- **Tactile**: Playdough triangles, tracing in sand trays.
- **Auditory**: Triangle song: *"3 sides, 3 corners — triangle, triangle!"*
- **Visual**: Real-life triangular objects (pizza slice, roof, traffic sign).

Plenary

Ask pupils to trace triangles in the air one last time. Conclude: *"How many sides does a triangle have? How many corners?"*

RECTANGLE

Student Learning Outcomes

- Identify and name the rectangle.
- Recognise characteristics (4 sides, 4 corners, opposite sides equal).
- Relate rectangles to real-life objects.

Manipulatives

- Rectangle cut-outs
- Baskets
- Sand trays
- Playdough
- Books
- Classroom objects

Methodology

Use cut-outs, group sorting, air tracing, and examples to clarify difference from squares.

Objective

Pupils will trace, identify, and describe rectangles, and connect them to real objects like doors and books.

Learning Curve

Pupils compare rectangle to square (both 4-sided).

Pre-emptive Pitfalls

Confusion with squares. Reinforce: "In rectangles, opposite sides are equal, not all four."

Main Activity

Recap: *"What shape did we learn yesterday? Triangle! How many sides does a triangle have?"* Pupils: *"Three."*

Introduce rectangle with cut-out: *"This is a rectangle. Say it with me: rectangle."* Spell and repeat.

Explain: *"A rectangle has 4 sides and 4 corners. But two sides are long, and two sides are short. Opposite sides are equal."*

Group sorting: pupils sort rectangles from mixed cut-outs.

Air tracing: *"Down, across, up, across — rectangle."* Pupils copy. Use sand trays and playdough for practice.

Shape Hunt: *"Find something shaped like a rectangle in this room. Doors? Notebooks? Desks?"* Pupils point out examples.

Textbook Practice Pages

Page 26: Pupils circle rectangle objects.

Exposition

Reinforce: *"A square has all equal sides, but a rectangle has opposite equal sides. Both have 4 corners."*

Multi-sensory Learning Stations

- **Tactile**: Playdough rectangles.
- **Auditory**: Rectangle rhyme: *"2 sides long, 2 sides short — rectangle, of course!"*
- **Visual**: Photos of rectangular doors, books, blackboards.

Plenary

Ask pupils to point out 1 rectangle they see before leaving.

OVAL

Student Learning Outcomes

- Identify and name the oval.
- Recognise oval characteristics (curved, no corners, looks like stretched circle).
- Relate to everyday objects (eggs, grapes, watermelons).

Manipulatives

- Oval cut-outs
- Sand trays
- Playdough
- Egg models
- Fruit pictures

Methodology

Introduce oval through visuals, cut-outs, and comparisons to circles.

Objective

Pupils will recognise and trace ovals, and identify oval-shaped real-life objects.

Learning Curve

Pupils build on circular understanding by recognising stretched variation.

Pre-emptive Pitfalls

Pupils may confuse ovals with circles. Reinforce: "Ovals look like circles stretched out."

Main Activity

Recap: *"What shape did we learn yesterday? Rectangle! What is special about a rectangle? Yes, opposite sides are equal."*

Introduce oval: hold up cut-out: *"This is an oval. Say it with me: oval."* Write **OVAL** on board, spell aloud.

Explain: *"An oval is curved, like a circle, but stretched. No corners, no straight sides."*

Group sorting: *"Find the ovals in your baskets."*

Air tracing: demonstrate: *"Round and stretched — that's an oval."* Pupils copy in air, then practise in sand trays/playdough.

Shape Hunt: *"Who can spot something oval in our class? What about an egg at home? Grapes? A watermelon?"*

Textbook Practice Pages

Page 26: Pupils point and circle oval-shaped objects.

Exposition

Reinforce: *"A circle is round, an oval is stretched. Eggs and fruits are oval."*

Multi-sensory Learning Stations

- **Tactile**: Form ovals in playdough.
- **Auditory**: Chant: *"Stretch a circle, make an oval!"*
- **Visual**: Eggs, grapes, fruit flash cards.

Plenary

Ask: *"Show me with your arms — make a circle... now stretch it. What is it?"*
Pupils: *"Oval!"*

TEXTBOOK PRACTICE / REVISION

Student Learning Outcomes

- Recognise and recall all 2D shapes (circle, square, triangle, rectangle, oval).
- Match shapes to names.
- Apply knowledge through puzzles and real-life connections.

Manipulatives

- Flash cards
- Cut-outs
- Chart paper
- Maze puzzle
- Colouring pencils

Methodology

Revision through recognition games, tracing, matching, and a maze puzzle.

Objective

Pupils will consolidate shape knowledge, recognise names, and apply learning in problem-solving.

Learning Curve

Pupils revise previous concepts and strengthen retention through integrated activities.

Pre-emptive Pitfalls

Pupils may confuse similar shapes. Scaffold carefully with teacher modelling.

Main Activity

Hold up shape cut-outs one by one. Ask: *"What shape is this? What are its sides/corners? Can you air-trace it?"* Pupils respond and practise.

Guide textbook work:

- **Page 27**: *"Point to a circle. Now trace it. Point to a square. Trace it."* Continue with all shapes.
- **Page 28**: Use flash cards to model matching names to shapes. Write RECTANGLE on the board: *"Who can spell RECTANGLE with me? Now find it on this page and match."* Pupils match all names and shapes.

- **Page 29**: Introduce maze: *"We need to help Buzzy get home by finding only shapes. Should we go to the apple? Is it a shape? No. Should we go to the circle? Yes!"* Continue step-by-step, involving pupils in decisions until they reach the finish. Pupils trace path in books.
- **Page 30**: Ask: *"What real-life objects do you see here? Can you find something shaped like a circle? Yes, the ball. Circle it with a red pencil."* Repeat for squares, triangles, rectangles, ovals.

Exposition

Reinforce vocabulary: circle, square, triangle, rectangle, oval.

Multi-sensory Learning Stations

- **Tactile**: Arrange cut-outs into sets, match shape to name.
- **Auditory**: Shape chant review: *"Circle, square, triangle, rectangle, oval!"*
- **Visual**: Maze puzzle, matching exercises.

Plenary

Ask: *"Which shape is your favourite? Can you show me with your hands?"* End with quick shape quiz: teacher points to cut-out → pupils answer in chorus.

TEACHER'S REFLECTION

What impact did the teaching strategy have on students' learning? How effective was the approach in achieving the lesson objectives?

3 Patterns

Student Learning Outcome	Suggested time: 2 Lessons
• Recognise simple repeated patterns in the environment.	

PATTERN RECOGNITION

Manipulatives

- Laminated cut-outs of shapes
- Coloured blocks
- Laminated animal pictures
- Classroom objects

Methodology

Introduce the concept of patterns through observation, real-life examples, and manipulatives. Scaffold activities from recognition to copying, extending, and creating patterns.

Objective

By the end of the lesson, pupils will be able to identify and describe simple patterns and attempt to create their own patterns using colours, shapes, or objects.

Learning Curve

Pupils begin by recognising AB patterns, progress to AAB and ABC, and finally create independent patterns.

Pre-emptive Pitfalls

Pupils may struggle to grasp "rule of repetition." Reinforce with phrases like *"same again"* and *"repeated."* Avoid small manipulatives that pose safety risks.

Main Activity

Start with introduction: *"Today, we are going to learn about patterns. Patterns are everywhere. They repeat again and again. Can you see any patterns around you?"* Show Page 31 scenery and ask: *"Do you see any birds or butterflies with patterns?"*

Circle Time: Gather coloured blocks. Create ABAB sequence: green–blue–green–blue. Ask: *"What comes next?"* Pupils reply: *"Green!"* Clap and repeat together: *"Green, blue, green, blue..."*

Explain: *"Patterns are repeated arrangements of shapes, colours, sounds, or actions. They always follow a rule."*

Demonstrate with shapes: circle–square–circle–square. Ask: *"Which shape comes next?"* Move on to AAB (circle–circle–triangle) and ABC (circle–square–triangle). Pause and ask pupils to predict next object each time.

Call a volunteer: *"Let's make our own pattern together. I'll place a red block. What should come next? Yes, a blue block. Now red, blue, red... what's next?"* Let pupils extend the sequence aloud.

Discuss nature: *"Do animals have patterns? Yes — look at zebras, butterflies, parrots, giraffes."* Show laminated pictures or slides. Discuss patterns in routines: morning–afternoon–evening–night.

Guide pupils to Page 31. Ask: *"Look at Buzzy and the garden. Can you spot the patterns on the wings of butterflies or on the flowers?"* Pupils then trace and colour the insects' patterns.

Textbook Practice Pages

Page 31: Pupils observe scenery, trace, and colour insects with patterns.

Exposition

Reinforce: *"Patterns are repeated. They can be colours, shapes, or even daily routines."*

Multi-sensory Learning Stations

- **Tactile**: Arrange blocks or beads into AB and AAB patterns.
- **Auditory**: Pattern clapping (clap–tap–clap–tap). Pupils predict sequence.
- **Visual**: Laminated pictures of patterned animals and objects.

Plenary

Ask: *"Who can show me a pattern with your hands?"* (e.g., clap–snap–clap–snap). End with: *"Patterns repeat again and again!"*

PATTERN RECOGNITION

Manipulatives

- Shape cut-outs
- Colouring pencils
- Two baskets (shapes vs toys)
- Laminated pictures

Methodology

Use concrete manipulatives, textbook exercises, and visual comparisons to reinforce patterns.

Objective

By the end, pupils will be able to extend missing patterns, complete patterns with shapes and colours, and spot differences between two pictures.

Learning Curve

Pupils move from identifying simple patterns → filling missing elements → spotting differences → creating their own patterns.

Pre-emptive Pitfalls

Pupils may confuse "pattern" with random sequence. Scaffold with guided questioning: *"What repeats?"*

Main Activity

Begin recap with blocks on the desk: *"Here is green, blue, green... what comes next?"* Pupils reply. Repeat with shape sequences.

Turn to **Page 32**. Point to Sandwich–Cookie pattern. Say aloud: *"Sandwich–Cookie–Sandwich... what should come next?"* Pupils: *"Cookie!"* Repeat with AAB Caterpillar–Caterpillar–Butterfly.

Demonstrate missing-shape pattern using cut-outs. Call aloud: *"Blue circle, green triangle, blue circle... what comes next?"* Pupils air-trace the missing shape before colouring in their books. Repeat with Pink Oval–Blue Circle sequence.

Move to ABC pattern: model slowly: *"Circle–Square–Triangle. What comes next?"* Pupils chant sequence and draw in textbooks.

Next, introduce "different." Place two baskets: one with shapes, one with toys. *"What's the difference? One has shapes, the other has toys."* On board,

show 2 similar pictures with slight differences. Model: *"In this picture, I see 3 candles. In this one, only 2. That is a difference."* Ask pupils to find more.

Guide them to **Page 33**. Ask: *"Can you find the cake in both pictures? Are they the same? How many balloons do you see in picture one? And in picture two?"* Continue with gifts, cupcakes, ladybirds. Praise attempts.

On **Page 34**, show bunting banner patterns. Ask: *"Can you make your own pattern here? What will you draw after this triangle banner?"* Allow pupils to create and share.

Textbook Practice Pages

Page 32: Complete AB, AAB, ABC patterns.

Page 33: Find and circle differences.

Page 34: Create your own bunting pattern.

Exposition

Reinforce: *"Patterns repeat. Differences mean things that are not the same."*

Multi-sensory Learning Stations

- **Tactile**: Pupils arrange cut-outs into their own AB/AAB sequences.
- **Auditory**: Clap–tap–snap pattern game.
- **Visual**: Spot-the-difference pictures, colourful banner patterns.

Plenary

Ask pupils to show their self-made bunting patterns. Invite them to explain: *"My pattern is red–blue–red–blue."* Conclude: *"Patterns help us see what comes next."*

4 Numbers: Part Two

Student Learning Outcomes	Suggested time: 6 Lessons
• Count objects saying the number names in the standard order, pairing each object with one and only one number name • Count backwards from 10-1 • Identify nothing equates to zero in quantity • Count and make sets of up to 10 objects • Count at least ten objects with one-to-one correspondence • Identify the number that comes before or after a given number up to 10	

NUMBER 6

Manipulatives

- Toys
- Balloons
- Hollow number charts
- Finger paints
- Sand trays
- Flash cards

Methodology

Introduce 6 with classroom objects and finger-counting, then model tracing. Use multi-sensory reinforcement (visual, auditory, tactile) to ensure mastery.

Objective

Pupils will count, recognise, and trace the number 6, and identify sets of 6 in their environment.

Learning Curve

Pupils extend their knowledge from 1–5 to the new number 6.

Pre-emptive Pitfalls

Some children may confuse 6 with 9. Emphasise stroke direction and repeated tracing.

Main Activity

Begin by reviewing 1–5 with flash cards. Ask: *"What comes after 5?"* Pupils: *"Six."* Place 6 toys on the desk, count aloud: *"1, 2, 3, 4, 5, 6."* Hold up 6 fingers and ask pupils to do the same.

Demonstrate tracing on the board: *"Start at the top, curve down left, then around to close."* Pupils copy in the air. Paste a hollow number 6 chart. Pupils in groups finger-paint and trace the number while chanting: *"Six, six, number six!"*

Guide pupils to spot 6 objects in the classroom: *"Find 6 pencils, 6 chairs, or 6 crayons."*

Textbook Practice:

Pages 36-39

Exposition

Reinforce: *"Six is one more than five. It looks like a curve and a loop."*

Multi-sensory Learning Stations

- **Tactile**: Sand trays, playdough 6s.
- **Auditory**: Number song up to 6.
- **Visual**: Flash cards and hollow charts.

Plenary

Play an action game: *"Clap 6 times! Jump 6 times! Tap your feet 6 times!"*

NUMBER 7

Manipulatives

- Hollow charts
- Finger paints
- Flash cards
- Sand trays
- Blocks

Methodology

Use chart tracing, games, and a maze puzzle for 7. Connect to real life through days of the week.

Objective

Pupils will confidently count to 7, write the number, and recognise sets of 7.

Learning Curve

Builds on 6, leading into sequencing of higher numbers.

Pre-emptive Pitfalls

Children may confuse 7 with I. Reinforce long horizontal stroke first.

Main Activity

Recap 6: *"What comes after 6?"* Pupils: *"Seven."* Place 7 objects on the desk, count together. Hold up 7 fingers.

Demonstrate tracing on the board: *"Across, then slant down — that's 7."* Pupils air-trace. Hollow chart: pupils finger-paint in groups, chanting *"Across and down, number 7."*

Guide pupils to count 7 objects in the room (7 books, 7 crayons).

Textbook Practice Pages:

Pages 40-43

Exposition

Connect to real life: *"There are 7 days in a week."*

Multi-sensory Learning Stations

- **Tactile**: Sand trays, playdough sevens.
- **Auditory**: Number song up to 7.
- **Visual**: Flash cards, maze puzzle.

Plenary

Ask pupils to clap 7 times, then say: *"Name the 7 days of the week."*

NUMBER 8

Manipulatives

- Hollow chart 8
- Finger paints
- Abacus
- Collage materials
- Sand trays

Methodology

Introduce 8 using toys and tracing, then engage through collage, abacus, and games.

Objective

Pupils will recognise, trace, and relate the number 8 to real-world sets.

Learning Curve

Builds sequencing from 7 to 8, reinforcing repetition.

Pre-emptive Pitfalls

Children may confuse 8 with two zeros. Reinforce "two circles stacked."

Main Activity

Recap 7: *"What comes after 7? Yes, 8!"* Place 8 toys on desk, count aloud. Pupils hold up 8 fingers.

Demonstrate tracing: *"Make a small circle on top, a bigger one below. Together that makes 8."* Pupils air-trace and chant: *"Circle on top, circle below, 8 we know!"*

Hollow 8 chart: pupils finger-paint. Then, group collage activity: paste colourful paper into a big hollow 8.

Introduce abacus: pupils slide 8 beads to represent 8.

Textbook Practice Pages:

Page 44-47

Exposition

Reinforce: *"Eight means 7 + 1. It is two circles joined."*

Multi-sensory Learning Stations

- **Tactile**: Sand trays, playdough 8s.
- **Auditory**: Simon Says game with 8 jumps/claps.
- **Visual**: Collage, abacus beads.

Plenary

Action chant: *"Do 8 jumping jacks, stomp 8 times, clap 8 times!"*

NUMBER 9

Manipulatives

- Hollow chart 9
- Sand trays
- Bean bag
- Blocks
- Flash cards

Methodology

Introduce 9 with tracing, counting, number line, and bean bag toss.

Objective

Pupils will identify, trace, and count with the number 9.

Learning Curve

Children extend from forward sequencing to backward introduction.

Pre-emptive Pitfalls

Children may confuse 9 with 6. Use contrasting board examples.

Main Activity

Recap 8: *"What comes after 8?"* Pupils: *"Nine."* Place 9 objects, count together. Pupils hold up 9 fingers.

Demonstrate tracing: *"Circle on top, straight line down. That's 9."* Pupils air-trace. Use hollow chart 9 for group finger painting.

Introduce number line jump: pupils hop to number 9. Play bean bag toss: aim at number 9 in grid.

Textbook Practice Pages:

Pages 48–49: count Buzzy's balloons, trace 9s. **Page 50**: spot scattered 9s. **Page 51**: connect dots backwards from 9 to 1 with Math Talk: *"We start at 9, then 8, then 7... keep going till 1."*

Exposition

Explain: *"9 is the biggest single digit. We also use it for countdowns — 9, 8, 7... 1."*

Multi-sensory Learning Stations

- **Tactile**: Tower of 9 blocks.
- **Auditory**: Backward counting songs.
- **Visual**: Number grid toss.

Plenary

Stand on one leg for 9 seconds, count aloud.

CONCEPT OF ZERO

Manipulatives

- Jars
- Baskets
- Plates
- Hollow 0 chart
- Flash cards
- Sand trays

Methodology

Demonstrate zero with containers of objects vs empty containers. Scaffold "something vs nothing."

Objective

Pupils will understand that 0 means nothing and practise writing it.

Learning Curve

Transition from counting "some" to "none."

Pre-emptive Pitfalls

Children may confuse 0 with O or circle. Reinforce: "Zero means empty."

Main Activity

Show jar with cookies vs empty jar. Ask: *"How many cookies? None. That is zero."* Repeat with baskets of fruit, boxes of toys.

On board, write ZERO with words "nothing, none." Have pupils repeat.

Demonstrate tracing: *"Start at top, go round and round — zero."* Pupils air-trace and use hollow 0 chart with finger paint.

Call out examples: *"How many elephants are in this room? Zero!"*

Textbook Practice Pages:

Pages 52-53

Exposition

Reinforce: *"Zero means none. An empty basket = zero."*

Multi-sensory Learning Stations

- **Tactile**: Trace 0 in sand trays.
- **Auditory**: Chant "Zero means nothing!"
- **Visual**: Empty vs full pictures.

Plenary

Movement game: *"Jump 2 times. Now jump 0 times!"*

NUMBER 10

Manipulatives

- Bundles of straws
- Hollow 10 chart
- Flash cards
- Playdough
- Number line

Methodology

Introduce 10 with bundles, counting, and backward sequencing. Connect with concept of 0.

Objective

Pupils will recognise, trace, and count to 10, as well as backwards.

Learning Curve

Children extend single digits to two-digit numbers.

Pre-emptive Pitfalls

Backward counting may be difficult. Begin with smaller sequences (3–1).

Main Activity

Recap 9. Then say: *"After 9 comes 10. 1 and 0 together make 10."* Place 10 toys on the desk, count together. Pupils hold up 10 fingers.

Demonstrate tracing: *"Down for 1, circle for 0. That's 10."* Pupils air-trace, then finger-paint hollow 10 chart.

Activity: make bundles of 10 straws, tie with rubber band. Count aloud with pupils.

Textbook:

Pages 54–59

Exposition

Reinforce: *"Ten is 1 and 0 together. It comes after 9."*

Multi-sensory Learning Stations

- **Tactile**: Playdough 10s, straw bundles.
- **Auditory**: Backward stomp game from 10–1.
- **Visual**: Flash cards, maze.

Plenary

Ask pupils to count 1–10, then 10–1 aloud.

5 ORDINAL NUMBERS

Student Learning Outcomes	Suggested time: 2 Lessons
• Use ordinal numbers 1st, 2nd, and 3rd to indicate position in a sequence, e.g. I put the blue ball third • Order and sequence numbers	

ORDINAL NUMBERS

Manipulatives

- Flash cards with 1st, 2nd, 3rd
- Number blocks
- Toy animals/cars
- Sequence story props (e.g., Hungry Caterpillar)

Methodology

Introduce ordinal numbers through real-life props, manipulatives, and storytelling. Scaffold from recognition of order to correct verbal use of "first, second, third."

Objective

Pupils will be able to identify, say, and use ordinal numbers (1st, 2nd, 3rd) to describe the position of objects, people, and events.

Learning Curve

Children extend from cardinal numbers (how many) to ordinal numbers (which position).

Pre-emptive Pitfalls

Pupils may confuse cardinal vs ordinal numbers, or struggle with "-st," "-nd," "-rd" sounds. Provide repetition and correction through choral response.

Main Activity

Begin: *"We know how to count how many. But today, we will learn how to*

say which one comes first, second, and third." Write **1st, 2nd, 3rd** on the board. Add words: *first, second, third.*

Line up 3 objects on the desk (toys or blocks). Point and say: *"This is first. This is second. This is third."* Pupils repeat in chorus.

Call volunteers: *"Let's make a birthday line. [Ali], your birthday comes first. [Sara], yours is second. [Ahmed], yours is third."* Repeat until several pupils practise.

Demonstrate tower-building with blocks: *"Here is the 1st block... this is 2nd... this is 3rd."* Pupils repeat.

Conduct a classroom walk: call 3 children to walk safely across the room. Ask: *"Who came first? Who came second? Who came third?"* Let the class answer aloud.

Textbook Practice Pages

- **Page 60**: Buzzy playing Pass the Pillow. Ask: *"Who got the pillow first? Who got it second? Who is third?"* Pupils colour the second child.
- **Page 61**: Race of ladybird, caterpillar, snail. Ask: *"The ladybird is first. Who is second? Who is third?"* Next picture: ducks at the pond. *"Which duck jumped first? Which one is second? Who is waiting third?"* Pupils answer while teacher points.

Exposition

Reinforce: *"Ordinal numbers tell us the order — first, second, third. Not how many, but which one."*

Multi-sensory Learning Stations

- **Tactile**: Line up toy cars or animals; pupils identify 1st–3rd.
- **Auditory**: Chant ordinal numbers in a rhyme: *"First, second, third — say it as you heard!"*
- **Visual**: Story props and textbook pictures.

Plenary

Ask: *"What is the first day of the week? What is the second month of the year?"* End with: *"First, second, third — order is the word!"*

ORDINAL NUMBERS

Manipulatives

- Number blocks
- Abacus
- Number train
- Flash cards
- Number mats
- Puzzles

Methodology

Use counting games, manipulatives, and visual puzzles to reinforce sequencing and ordinal use.

Objective

Pupils will confidently arrange numbers 1–10 in order, identify missing numbers, and use ordinal terms to describe position.

Learning Curve

Children transition from 1st–3rd positions to full number order 1–10, including backward counting.

Pre-emptive Pitfalls

Backward counting may be challenging. Use concrete aids like mats or lines for support.

Main Activity

Start with counting forwards using manipulatives: *"Let's help Buzzy line up the number blocks. What comes after 1? After 2? Let's say it together: 1, 2, 3... 10."*

Use abacus beads: pupils slide beads while counting aloud.

Introduce number train: call a pupil to "walk the train" while class counts 1–10.

Then, scramble number blocks and ask pupils to reorder them: *"Which number comes first? Which comes after? Which comes last?"*

Guide to **Page 62**: scrambled boxes with dots. Ask: *"How many dots here? Yes, 3. Which number is that? Trace it."* Pupils write numbers step by step.

Next, introduce backward counting: *"Before 10 comes 9, before 9 comes 8...*

Let's count backwards together: 10, 9, 8... 1." Use number mats: call pupils to hop backwards while counting.

Show **Visual Maze** on board. Say: *"We must go from 10 to 1. Should we go this way? No, that's 7. Let's go here. Count backwards together."* Pupils complete puzzle in book.

Cupcake-making sequence (props or pictures): *"First we bake, second we frost, third we decorate."* Pupils label pictures in textbook with 1st, 2nd, 3rd.

Textbook Practice Pages

- Page 62: Count forward 1–10, reorder scrambled boxes.
- Page 63: Cupcake-making sequence. Pupils label steps.
- Page 64: Sets of objects; pupils circle specified numbers. Connect the dots to complete Buzzy's picture.

Exposition

Reinforce: *"Numbers can be counted forwards and backwards. Ordinal numbers show order — first, second, third."*

Multi-sensory Learning Stations

- **Tactile**: Number mats for hopping forwards/backwards.
- **Auditory**: Forward/backward counting songs.
- **Visual**: Puzzles, cupcake pictures, number lines.

Plenary

Ask pupils: *"If Ali wakes up, then brushes teeth, then eats breakfast — which is first? Which is second? Which is third?"*

6 Comparison: Part One

Student Learning Outcomes	Suggested time: 5 Lessons
• Differentiate between less and more • Use words such as more, less to indicate differences in quantity • Describe and compare objects using length, weight, height, and temperature - hot and cold - as measurement attributes	

FEW AND MANY

Manipulatives

- Toys
- Books
- Crayons
- Containers
- Whiteboards

Methodology

Introduce concept through sets of classroom objects, guided counting, pair activities, and real-life connections.

Objective

Pupils will be able to describe groups of objects as “few” or “many” using correct vocabulary.

Learning Curve

Students progress from recognising “small amount vs large amount” to applying vocabulary independently.

Pre-emptive Pitfalls

Pupils may confuse “few” with “one.” Clarify: *“Few means some, not none.”*

Main Activity

Welcome: *“Today we will learn to see which things are many and which are few.”*

Show 2 groups of crayons (2 vs 10). Ask: *"Which group has many crayons? Which group has few?"* Pupils answer in chorus. Repeat with books, pencils, toys.

Call 2 volunteers. Give one "few" items and the other "many." Ask: *"Who has more? Who has less? Which is few, which is many?"* Repeat with different objects.

Take pupils on a short "nature walk." Each collects pebbles/leaves. Back in class, compare: *"Ali has many leaves, Sara has few."*

Pair activity: pupils draw objects on mini-whiteboards. Ask: *"How many did you draw? Who has many? Who has few?"*

Textbook Practice Pages

Page 66: Count cookies. Ask: *"Which plate has more cookies? Which has fewer?"* Pupils colour cookies.

Page 67: Compare cupcakes, juice boxes, doughnuts.

Exposition

Reinforce: *"Few means small in number, many means large in number."*

Multi-sensory Learning Stations

- **Tactile**: Sort classroom items into "few/many" baskets.
- **Auditory**: Chant: *"Few is small, many is tall!"*
- **Visual**: Flash cards and picture cards.

Plenary

Flash card quiz: show sets, ask: *"Few or many?"*

MORE AND LESS

Manipulatives

- Water cups
- Blocks
- Bowls of sand
- Flash cards

Methodology

Hands-on demonstrations with cups, blocks, and sand. Repetition of key vocabulary.

Objective

Pupils will accurately describe which set has more or less.

Learning Curve

From identifying "few/many" → comparing "more/less."

Pre-emptive Pitfalls

Pupils may assume "less" = "empty." Use clear side-by-side demonstrations.

Main Activity

Recap: *"Who remembers few and many?"*

Show 2 cups with different water levels. Ask: *"Which cup has more water? Which has less?"* Pupils repeat sentence after teacher.

Block towers: call 2 volunteers to build. Ask: *"Which tower has more blocks? Which has less?"*

Sand activity: pupils pour into bowls, compare.

Toy race: 2 pupils collect blocks. Ask: *"Who picked up more? Who picked up less?"* Pupils respond chorally.

Textbook Practice Pages

Page 68: Compare quantities in pictures, circle more/less.

Exposition

Reinforce: *"More means greater amount, less means smaller amount."*

Multi-sensory Learning Stations

- **Tactile**: Pour water/sand, compare.
- **Auditory**: Call-and-response: *"More is greater!" — "Less is fewer!"*
- **Visual**: Flash cards of more/less sets.

Plenary

Ask: *"At home, can you find something that is more? Something that is less?"*

EMPTY AND FULL / HALF

Manipulatives

- Containers
- Water
- Fruit
- Paper
- Jars with snacks

Methodology

Use real containers, folding, and cutting to demonstrate.

Objective

Pupils will describe containers and objects as full, empty, or half.

Learning Curve

Concrete demonstration → verbal description → independent application.

Pre-emptive Pitfalls

Children may confuse "half" with "less." Show halves visually.

Main Activity

Start with empty glass: *"Is it empty or full?"* Pupils: *"Empty!"* Fill it: *"Now it is full."* Half fill: *"Now it is half full."*

Call volunteers to fill/empty cups and describe aloud: *"This is full... this is empty."*

Paper folding: show one whole sheet, then fold: *"Now we have two halves."* Pupils repeat.

Fruit cutting: show apple/banana whole, then cut in half: *"This is one whole, these are halves."*

Jar activity: show jars with biscuits. Ask: *"Which jar is full? Which jar is empty? Which jar is half?"*

Textbook Practice Pages

Pages 69–70: Pupils identify full, empty, half-full containers and objects.

Exposition

Reinforce: *"Empty = nothing, full = completely filled, half = divided into two equal parts."*

Multi-sensory Learning Stations

- **Tactile**: Pour water into cups to full, half, empty.
- **Auditory**: Song: *"Empty, full, and half today — that's how we describe, hooray!"*
- **Visual**: Folding paper, cutting fruit.

Plenary

Quick-fire quiz: teacher holds up jars/containers, pupils call: *"Empty!" "Full!" "Half!"*

HOT AND COLD

Manipulatives

- Fan
- Hair dryer
- Bowls with warm/cold water
- Laminated cards
- Toy props (tea, ice cream)

Methodology

Use sensory comparisons with safe supervision. Link to real-world examples.

Objective

Pupils will classify objects as hot or cold.

Learning Curve

Direct sensory experiences → vocabulary application.

Pre-emptive Pitfalls

Safety concerns with heat sources. Strict teacher supervision needed.

Main Activity

Ask: *"What things are hot? What things are cold?"* Pupils brainstorm.

Show bowls: one warm water, one cold. Pupils feel and say: *"This is hot, this is cold."*

Show clothes pictures: *"In winter, we wear warm clothes because it's cold. In summer, light clothes because it's hot."*

Demonstrate fan and hair dryer safely: *"Fan air is cooler. Hair dryer air is hotter."* Pupils repeat.

Sorting game: toy props/pictures of tea, coffee, ice, sun, snowflake. Pupils classify into hot/cold.

Textbook Practice Pages

Page 71: Pupils identify hot and cold objects, colour cool objects blue and hot objects red.

Exposition

Reinforce: *"Hot means high temperature, cold means low temperature."*

Multi-sensory Learning Stations

- **Tactile**: Feel warm/cold bowls.
- **Auditory**: Chant: *"Hot and cold, young and old — warm in winter, cool when told!"*
- **Visual**: Hot/cold flash cards.

Plenary

Ask: *"Is the sun hot or cold? Is ice hot or cold?"* Pupils answer chorally.

7 Addition

Student Learning Outcomes	Suggested time: 2 Lessons
• Compare two or more sets and identify the set that has more objects • Add sets of objects smaller than 3 • Recognise that when two sets combine the total number increases (more)	

ONE MORE

Manipulatives

- Food props
- Laminated food cards
- Blocks
- Flash cards

Methodology

Introduce addition with food props and toys. Scaffold "one more" using repeated counting and visual reinforcement.

Objective

Pupils will understand that adding one more increases the total.

Learning Curve

Pupils transition from rote counting to understanding that the set grows when we add.

Pre-emptive Pitfalls

Pupils may confuse "one more" with "take away." Emphasise: "One more = bigger."

Main Activity

Start with food props. *"Buzzy had 1 cupcake. She bought 1 more. Let's count: 1, 2. Now there are 2."* Pupils repeat in chorus.

Repeat with snacks: *"3 apples + 1 more = 4."*

Toy activity: Call volunteers:

- "Ali has 2 blocks. I give him 1 more. How many now?"
- "Sara has 4 crayons. Add 1 more. Count together!"
- Write number sentences on the board: *"2 + 1 = 3, 3 + 1 = 4."*

Textbook Practice Pages:

Page 72

Exposition

Reinforce: *"When we add, the number becomes bigger. One more means add 1."*

Multi-sensory Learning Stations

- **Tactile**: Use blocks for one-more game.
- **Auditory**: Chant: *"One more, add one more!"*
- **Visual**: Flash cards with +1.

Plenary

Ask: *"What is one more than 5? One more than 2?"*

ADDING TOGETHER

Manipulatives

- Blocks
- Counters
- Toy animals
- Flash cards

Methodology

Teach addition through objects, flash cards, and real-life play.

Objective

Pupils will add sets of objects and write simple addition sentences.

Learning Curve

Move from "one more" to combining two groups.

Pre-emptive Pitfalls

Pupils may count one set twice. Guide carefully with finger-pointing.

Main Activity

On desk: *"Here are 2 red cars and 3 blue cars. Let's put them together. How many now? 1, 2, 3, 4, 5. 2 + 3 = 5."* Pupils repeat.

Repeat with blocks: *"Ali has 4. Sara has 2. Altogether? 6."* Write 4 + 2 = 6.

Introduce addition symbol + and equals = on board. Pupils practise writing with mini-whiteboards.

Textbook Practice Pages

Page 73–74: Pupils add objects, trace numbers, write totals.

Exposition

Reinforce: *"Addition means putting together. Plus means add, equals means total."*

Multi-sensory Learning Stations

- **Tactile**: Combine playdough balls.
- **Auditory**: Addition song: *"1 and 2 make 3!"*
- **Visual**: Flash cards of two groups combining.

Plenary

Ask pupils quick sums: *"2 + 1? 3 + 2?"*

8 Subtraction

Student Learning Outcomes	Suggested time: 2 Lessons
• Recognise that when sets are taken apart the total decreases (less) • Subtract with sets of objects smaller than 3	

ONE LESS

Manipulatives

- Food props
- Laminated food pictures
- Toy blocks
- Flash cards

Methodology

Use snacks and toys for concrete demonstration of subtraction.

Objective

Pupils will see that when something is taken away, the set becomes smaller.

Learning Curve

Shift from addition (more) to subtraction (less).

Pre-emptive Pitfalls

Pupils may mix "more" with "less." Stress: *"Less = smaller group."*

Main Activity

Snack demo: *"Buzzy had 3 cupcakes. She ate 1. How many left? 2."* Pupils repeat: *"3 take away 1 is 2."*

Toys:

- "Ali has 3 cars. Take away 1. How many left?"
- "Sara has 5 crayons. Take away 1. Count with me."

Flash cards: Show 4, cover 1, pupils say *"4 take away 1 is 3."*

Textbook Practice Pages

Page 75–76: Balloon subtraction, food items taken away.

Exposition

Reinforce: *"Subtraction means taking away. The total gets smaller."*

Multi-sensory Learning Stations

- **Tactile**: Pupils remove blocks from towers.
- **Auditory**: Chant: *"Take away, get less today!"*
- **Visual**: Cross out pictures on flash cards.

Plenary

Quick-fire: *"One less than 5? One less than 2?"*

TAKE AWAY

Model subtraction with toys and counting fingers.

Manipulatives

- Toys
- Blocks
- Flash cards
- Stars cut-outs

Objective

Pupils will subtract small numbers using objects and number sentences.

Learning Curve

Concrete → pictorial → symbolic.

Pre-emptive Pitfalls

Backward counting may be difficult. Scaffold carefully.

Main Activity

Demonstrate: *"Here are 4 stars. Take away 1. Let's count — 1, 2, 3 left. 4 – 1 = 3."*

Repeat with books, blocks, crayons. Call pupils to practise.

Finger subtraction: *"Show 5 fingers. Take away 2. How many left? 3."*

Textbook Practice Pages

Page 77: Star subtraction exercises. Pupils colour leftovers.

Exposition

Reinforce: *"Taking away leaves fewer. The total is less."*

Multi-sensory Learning Stations

- **Tactile**: Remove objects from baskets.
- **Auditory**: Subtraction rhyme.
- **Visual**: Flash cards of sets before/after.

Plenary

Ask: *"If I had 3 apples and ate 1, how many left?"*

9 Comparison: Part Two

Student Learning Outcomes	Suggested time: 6 Lessons
• Use language to compare the sizes of objects (e.g. big, little, small) • Explore measuring tools (e.g. cup, glass, ruler etc.) and use nonstandard units of measure for comparison • Describe and compare objects using length, weight, height, and temperature - as measurement attributes	

DAY I: LONG AND SHORT

Manipulatives

- Ribbons
- Pencils
- Straws
- Blocks

Methodology

Use classroom objects to compare length.

Objective

Pupils will describe and compare objects by length.

Learning Curve

Direct observation → vocabulary application.

Pre-emptive Pitfalls

Children may confuse tall vs long. Clarify context.

Main Activity

Place 2 pencils: *"Which is longer? Which is shorter?"* Pupils respond.

Line up ribbons, straws, sticks. Pupils compare in pairs: *"My ribbon is longer."*

Textbook Practice Pages

Page 78: Long vs short objects to circle.

Exposition

Reinforce: *"Length tells us how long something is."*

Multi-sensory Learning Stations

- **Tactile**: Measure ribbons side-by-side.
- **Auditory**: Chant: *"Longer, shorter, let's compare!"*
- **Visual**: Flash cards of animals (giraffe tail vs cat tail).

Plenary

Ask: *"Show me something long in this room. Something short?"*

TALL AND SHORT

Manipulatives

- Blocks
- Bottles
- Classroom objects

Methodology

Demonstrate with pupils and classroom objects.

Objective

Pupils will compare height using correct terms.

Learning Curve

Concrete comparison → independent usage.

Pre-emptive Pitfalls

Confusion between length and height. Use people vs objects.

Main Activity

Ask 2 pupils to stand: *"Ali is tall, Sara is short. Who is taller?"* Pupils respond.

Stack blocks: *"This tower is taller. This one is shorter."*

Textbook Practice Pages

Page 79: Circle tallest/shortest.

Exposition

Reinforce: *"Tall is how high something stands."*

Multi-sensory Learning Stations

- **Tactile**: Build block towers.
- **Auditory**: Chant: *"Tall, short, compare!"*
- **Visual**: Pictures of tall buildings, short huts.

Plenary

Ask: *"Point to the tallest object in this room."*

HEAVY AND LIGHT

Manipulatives

- Bags
- Books
- Feather
- Toy blocks

Methodology

Demonstrate with classroom objects, scales if available.

Objective

Pupils will compare and classify objects by weight.

Learning Curve

Direct handling → vocabulary → independent classification.

Pre-emptive Pitfalls

Children may confuse size with weight. Stress: "Big is not always heavy."

Main Activity

Hold a bag and a pencil. Ask: *"Which is heavy? Which is light?"* Pupils reply.

Let children hold two objects each and compare aloud.

Textbook Practice Pages

Page 80: Circle heavy/light objects.

Exposition

Reinforce: *"Weight tells us how heavy or light."*

Multi-sensory Learning Stations

- **Tactile**: Lift objects.
- **Auditory**: Song: *"Heavy, light, compare just right!"*
- **Visual**: Flash cards heavy/light.

Plenary

Ask: *"Which is heavier: your book or your eraser?"*

10 TIME

Student Learning Outcomes	Suggested time: 3 Lessons
• Differentiate between day and night, before and after • Recognise informal time units and know that clocks and calendars mark the passage of time • Recognise and use language relating to days of the week, months of the year	

Manipulatives

- Flash cards (sun, moon, clock, daily tasks).

Methodology

Use stories, daily routines, and visual cards.

Objective

Pupils will describe daily events in order and use time words.

Learning Curve

From concrete routine → sequencing → vocabulary application.

Pre-emptive Pitfalls

Children may confuse "yesterday" vs "tomorrow." Use stories for clarity.

Main Activity

Ask: *"What do you do in the morning? At night?"* Pupils answer.

Show flash cards: sun = morning, lunch = afternoon, moon = night. Sequence cards on board.

Tell short story: *"Yesterday we went to the park. Today we are in class. Tomorrow we will play again."* Pupils repeat key terms.

Textbook Practice Pages

Page 82: Match activities to morning/afternoon/night.

Page 83: Colour pictures of daily events.

Exposition

Reinforce: *"Time tells us when things happen."*

Multi-sensory Learning Stations

- **Tactile**: Arrange routine cards in order.
- **Auditory**: Sing "Days of the Week."
- **Visual**: Morning/evening scenes.

Plenary

Ask: *"What did you do yesterday? What will you do tomorrow?"*

11 POSITION

Student Learning Outcome	Suggested time: 4 Lessons
• Use language related to location (prepositions, e.g. above, below, under, over, etc.)	

Manipulatives

- Toys
- Chairs
- Boxes
- Flash cards

Methodology

Teach position through classroom demonstration and games.

Objective

Pupils will describe position of objects using correct prepositions.

Learning Curve

Concrete demonstration → repetition → independent use.

Pre-emptive Pitfalls

Pupils may reverse "in front/behind" or "between/beside." Use repetition.

Main Activity

Show toy and chair: place toy on chair. Ask: *"Where is the toy? On the chair."* Repeat with in, under, behind.

Call pupils to demonstrate: *"Stand between your friends. Sit beside Ali. Stand behind Sara."*

Play Simon Says with position commands: *"Simon says: put your pencil under the desk."*

Textbook Practice Pages

Pages 85–86: Pupils identify positions of Buzzy in pictures and circle/copy words.

Exposition

Reinforce: *"Position tells us where something is."*

Multi-sensory Learning Stations

- **Tactile**: Pupils move toys around boxes.
- **Auditory**: Chant: *"In, on, under, behind — positions we can find!"*
- **Visual**: Flash cards with toy in different positions.

Plenary

Ask: *"Where is your pencil now? On your desk? Under your book?"*