

Mathematics Grade 3 — Lesson 1

Term 3, Week 7: Number, Operations and Relationships

CAPS 123 Generic School

CAPS Weekly Lesson Planner

Lesson 1

KEY VOCABULARY

forwards backwards greater than smaller than hundreds, tens, units

PREVIOUS LEARNING

Builds on learners' existing skill of counting in 1s within 500 and their understanding of place value in 3-digit numbers.

LEARNING OBJECTIVES

- Learners will be able to count forwards and backwards in 1s from any given number between 0 and 700.
- Learners will be able to compare two numbers using the terms 'greater than' and 'smaller than'.
- Learners will be able to identify the number before and after a given number up to 700.

ACTIVITIES

Beginning

10 minutes

Mental maths warm-up: teacher calls out a number between 0-700 and learners count forwards/backwards in 1s as a class, clapping on each count. Quick oral questions: 'What number comes after 349? Before 500?'

Resources: chalkboard

Middle

30 minutes

Using bottle tops/counters grouped in tens and hundreds (teacher-made place value apparatus), learners work in pairs to build two 3-digit numbers and compare them using '>' and '<' symbols drawn on cards. Teacher models on the board with number lines showing counting forwards and backwards. Learners then complete textbook exercises comparing and ordering pairs of numbers up to 700, writing greater than/smaller than statements in exercise books.

Resources: textbook, exercise books, bottle tops/counters, hand-made place value cards, chalkboard

End

5 minutes

Quick whole-class check: teacher writes two numbers on the board (e.g. 456 and 465); learners hold up a 'greater than' or 'smaller than' hand signal card to show which is correct.

Resources: hand signal cards

DIFFERENTIATION

SUPPORT

Provide learners with a printed number line 0-700 and allow them to count in smaller steps (e.g. starting from multiples of 10) with peer support during pair work.

EXTENSION

Challenge stronger learners to count backwards in 1s from a 3-digit number crossing a hundred boundary (e.g. from 503 backwards) and to compare three numbers at once, ordering them.

INFORMAL ASSESSMENT

Observe pair work with counters and listen to oral responses during the hand-signal activity to check understanding of greater than/smaller than.

Mathematics Grade 3 — Lesson 2

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Lesson 2

KEY VOCABULARY

ascending order

descending order

smallest to greatest

number bonds

sum

PREVIOUS LEARNING

Builds on Lesson 1's comparison of numbers using greater than/smaller than to now order a set of numbers.

LEARNING OBJECTIVES

- Learners will be able to order a set of at least 4 numbers from smallest to greatest and greatest to smallest.
- Learners will be able to recall number bonds to 30 with increasing fluency.

ACTIVITIES

Beginning

10 minutes

Mental maths: rapid-fire number bond questions to 30 (e.g. 'What plus 12 makes 30?') using flashcards; learners respond chorally and on individual whiteboards/slates.

Resources: flashcards, slates/whiteboards

Middle

30 minutes

Learners work in small groups of 4-5 using number cards (teacher-made, numbers 0-700) to physically arrange themselves or their cards in order from smallest to greatest, then reverse the order. Teacher circulates checking groups. Follow-up: learners complete textbook exercises ordering sets of numbers and practising number bonds to 30 using bond diagrams (part-part-whole) drawn in exercise books.

Resources: textbook, exercise books, number cards, chalkboard

End

5 minutes

Teacher writes 5 jumbled numbers on the board; whole class orally orders them together as a consolidation check.

Resources: chalkboard

DIFFERENTIATION

SUPPORT

Give struggling learners sets of only 3 numbers with a smaller range (e.g. 100-300) and use concrete counters to model bonds to 20 before moving to 30.

EXTENSION

Give advanced learners sets of 6-8 numbers including numbers close in value, and ask them to find multiple number bond pairs for 30 and record them systematically.

INFORMAL ASSESSMENT

Informal observation of group ordering activity; quick individual questioning on number bonds to 30 during the warm-up.

Mathematics Grade 3 — Lesson 3

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Lesson 3

KEY VOCABULARY

add subtract total difference regroup

PREVIOUS LEARNING

Builds on learners' prior addition and subtraction skills to 500, extending calculations to numbers up to 800.

LEARNING OBJECTIVES

- Learners will be able to solve addition problems with totals up to 800 using concrete apparatus and pictorial methods.
- Learners will be able to solve subtraction problems with numbers up to 800.
- Learners will be able to solve simple word problems involving addition and subtraction in context.

ACTIVITIES

Beginning

10 minutes

Mental maths: quick addition and subtraction questions within 100 to warm up (e.g. $45+30$, $80-25$), building towards larger numbers, answered on slates.

Resources: slates/whiteboards

Middle

30 minutes

Teacher models addition and subtraction to 800 using bundled bottle tops/counters (hundreds, tens, units) on the board, demonstrating regrouping. Learners then solve two context-based word problems (e.g. 'The shop had 456 apples and sold 189, how many are left?') in pairs, first using counters, then writing the abstract number sentence. Learners complete matching textbook exercises independently.

Resources: textbook, exercise books, bottle tops/counters, chalkboard

End

5 minutes

Teacher poses one oral word problem; selected learners explain their method and answer to the class.

DIFFERENTIATION

SUPPORT

Provide struggling learners with pre-bundled tens and hundreds counters and smaller number ranges (up to 500) with step-by-step guided prompts.

EXTENSION

Challenge stronger learners with two-step word problems (addition and subtraction combined) using numbers close to 800.

INFORMAL ASSESSMENT

Observe learners' use of counters and check written number sentences for correct regrouping during pair work.

Mathematics Grade 3 — Lesson 4

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Lesson 4

KEY VOCABULARY

repeated addition

equal groups

share equally

multiply

divide

PREVIOUS LEARNING

Builds on addition skills from Lesson 3, extending repeated addition to introduce the concept of multiplication and grouping/sharing.

LEARNING OBJECTIVES

- Learners will be able to solve problems using repeated addition and relate this to multiplication.
- Learners will be able to solve problems involving equal grouping and equal sharing using concrete apparatus.

ACTIVITIES

Beginning

10 minutes

Mental maths: teacher shows groups of objects (e.g. 4 groups of 3 counters) and learners say the repeated addition sentence aloud ($3+3+3+3$) then the multiplication sentence (4×3).

Resources: counters

Middle

30 minutes

In small groups, learners use counters/bottle tops to physically create equal groups to solve grouping problems (e.g. 'Share 20 sweets equally among 4 learners, how many each?') and repeated addition problems (e.g. 'There are 5 bags with 4 apples each, how many apples in total?'). Learners record their working as repeated addition and as a multiplication sentence in exercise books. Teacher circulates to support. Learners then complete related textbook problems.

Resources: textbook, exercise books, counters/bottle tops, chalkboard

End

5 minutes

Quick check: teacher gives one grouping problem orally; learners show answer using fingers or by holding up counters.

Resources: counters

DIFFERENTIATION

SUPPORT

Give struggling learners smaller quantities (e.g. sharing 10 among 2) and allow physical manipulation of counters throughout with teacher guidance.

EXTENSION

Challenge stronger learners with problems involving remainders (e.g. 'Share 22 sweets among 4, how many each and how many left over?') and ask them to write both grouping and sharing number sentences.

INFORMAL ASSESSMENT

Observe group work with counters to check understanding of equal grouping/sharing and ability to connect repeated addition to multiplication.

Mathematics Grade 3 — Lesson 5

Term 3, Week 7: Number, Operations and Relationships

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Lesson 5

KEY VOCABULARY

multiplication table times product count in twos/fours/fives pattern

PREVIOUS LEARNING

Builds directly on Lesson 4's repeated addition and grouping work, formalising this into multiplication tables for 2, 4, 5, 10 and 3.

LEARNING OBJECTIVES

- Learners will be able to multiply numbers 1 to 10 by 2, 4, 5, 10 and 3 up to a product of 100.
- Learners will be able to recognise and continue skip-counting patterns for these tables.

ACTIVITIES

Beginning

10 minutes

Skip-counting warm-up: whole class counts aloud in 2s, then 5s, then 10s together while clapping; teacher writes the pattern on the board.

Resources: chalkboard

Middle

30 minutes

Learners work in pairs using counters arranged in arrays (rows and columns) to build multiplication facts for 2, 4, 5, 10 and 3 (e.g. 3 rows of 4 counters = 3×4). Teacher models recording as both repeated addition and multiplication sentences on the board. Learners then complete a textbook multiplication grid/exercise, and play a quick paired 'call and response' game reciting tables using flashcards.

Resources: textbook, exercise books, counters, multiplication flashcards, chalkboard

End

5 minutes

Whole-class quick-fire round: teacher asks random multiplication facts from the week's tables; learners answer on slates, held up together for teacher to scan understanding.

Resources: slates/whiteboards

DIFFERENTIATION

SUPPORT

Allow struggling learners to build arrays with counters for every question and focus only on the 2 and 5 times tables initially, with a printed table for reference.

EXTENSION

Challenge advanced learners to work out multiplication facts beyond $10 \times$ (e.g. up to 100) mentally without counters and to identify patterns across the different tables (e.g. relationship between $\times 2$ and $\times 4$).

INFORMAL ASSESSMENT

Quick-fire slate check at the end of the lesson to informally assess individual recall of multiplication facts for 2, 4, 5, 10 and 3.