

RATIONALISED CBE LESSON PLANS

GRADE : TWO

TERM : THREE

YEAR :2025

LEARNING AREA: MATHEMATICS ACTIVITIES

TEACHERS NAME:

SCHOOL :

WEEK 1**LESSON 1**

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Number concept

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify numbers 1-100 in symbols in different situations.
- Represent numbers 1-100 using concrete objects from the environment.
- Appreciate the use of numbers in real-life situations.

KEY INQUIRY QUESTION(S): How can we represent numbers using objects?

LEARNING RESOURCES:

- Charts
- Number cards
- Objects (e.g., stones, bottle tops, sticks)
- Tusome Early Years Education pupil's book grade 2 (page 134)

ORGANISATION OF LEARNING: Learners will work in groups and individually.

INTRODUCTION The teacher will start with a warm-up song about numbers (e.g., "One, two, buckle my shoe"). This will be followed by a quick session of counting from 1 to 50.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will display a number chart and number cards from 1 to 100. The teacher will point to numbers at random, and the class will read them aloud.
- **STEP 2:** In groups, learners will go outside to collect a variety of safe concrete objects (like leaves, small stones, or sticks).
- **STEP 3:** The teacher will show a number card (e.g., 45), and each group will count out that number of objects from their collection.
- **STEP 4:** Learners will practice representing different numbers shown on flashcards by creating corresponding groups of objects.

CONCLUSION The teacher will give each learner a written number, and they will be required to draw that number of objects (e.g., balls, flowers) in their exercise books.

EXTENDED ACTIVITIES Learners to count a set of items at home (e.g., spoons in the kitchen) and write down the number.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Number concept

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify numbers 1-100 in symbols in different situations.
- Represent numbers 1-100 using concrete objects from the environment.
- Appreciate the use of numbers in real-life situations.

KEY INQUIRY QUESTION(S): How can we represent numbers using objects?

LEARNING RESOURCES:

- Charts
- Number cards
- Objects
- Tusome Early Years Education pupil's book grade 2 (page 135)

ORGANISATION OF LEARNING: Learners will engage in practical counting and recognition activities.

INTRODUCTION The teacher will review the previous lesson by holding up a number of fingers and having the class shout out the number.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will recognize and read numbers 1-100 from charts and number cards.
- **STEP 2:** In pairs, one learner will show a number card, and the other will count out the correct number of objects (e.g., counters, beans).
- **STEP 3:** The learners will switch roles and repeat the activity.
- **STEP 4:** The teacher will lead a discussion on where they see numbers in real life (e.g., on clocks, calendars, money, car number plates), emphasizing their importance.

CONCLUSION The teacher will conduct a quick oral quiz by pointing to numbers on a chart and having individual learners identify them.

EXTENDED ACTIVITIES Learners to find and write down five different numbers they see in their home environment.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Counting forward by 10

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Count numbers by 10 forward from 10-100.
- Count numbers by 10 backward from 100-10.
- Appreciate counting numbers by 10 forward/backward.

KEY INQUIRY QUESTION(S): How many fingers do you have in your hands?

LEARNING RESOURCES:

- Counters
- Marbles
- Tusome early years (KLB) grade 2 (page 137)
- A 100-grid chart

ORGANISATION OF LEARNING: Learners will work in pairs and as a whole class.

INTRODUCTION The teacher will ask all learners to hold up both hands and count their fingers, establishing the number 10. The teacher will explain that today they will count in groups of 10.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** In pairs, learners will use counters or marbles to make groups of 10.
- **STEP 2:** The teacher will lead the class in counting forward by 10s (10, 20, 30...100) while pointing to the numbers on a 100-grid chart.
- **STEP 3:** The class will then practice counting backward by 10s from 100 to 10.
- **STEP 4:** Learners will complete a written exercise in their books where they fill in the missing numbers in a sequence of 10s.

CONCLUSION The teacher will lead a "skip counting" song or chant by 10s to make the learning memorable and fun.

EXTENDED ACTIVITIES Learners to practice counting by 10s with a family member.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Place value

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Use a place value chart to represent numbers.
- Use an abacus to represent numbers.

KEY INQUIRY QUESTION(S): How do you identify the place value of a number, for example, 100, using an abacus?

LEARNING RESOURCES:

- Abacus
- Place value chart
- Tusome early years (KLB) grade 2 (page 138)

ORGANISATION OF LEARNING: Learners will work individually and in groups.

INTRODUCTION The teacher will write a 2-digit number like '58' on the board and ask learners what each digit stands for, reviewing the concepts of 'Tens' and 'Ones'.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will introduce a place value chart with three columns: Hundreds, Tens, and Ones.
- **STEP 2:** The teacher will demonstrate how to represent numbers like 74 and 100 on the place value chart.
- **STEP 3:** The teacher will then demonstrate how to represent the same numbers on an abacus. For 100, one bead goes on the Hundreds rod, and zero beads on the Tens and Ones rods.
- **STEP 4:** In groups, learners will practice representing different numbers up to 100 on both the place value chart and the abacus.

CONCLUSION The teacher will call out a number, and learners will show its representation on their abacuses to check for understanding.

EXTENDED ACTIVITIES Learners to draw a place value chart and represent the number of learners in their class.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Place value

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Use a place value chart to represent numbers in ones, tens, and hundreds.
- Use an abacus to represent numbers in ones, tens, and hundreds.

KEY INQUIRY QUESTION(S): How do you identify the place value of a number, for example, 87, using an abacus?

LEARNING RESOURCES:

- Abacus
- Place value chart
- Tusome early years (KLB) grade 2

ORGANISATION OF LEARNING: Learners will engage in practical activities using place value tools.

INTRODUCTION The teacher will quickly review the place value columns: Hundreds, Tens, and Ones.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will give each group number cards (e.g., 87, 9, 100).
- **STEP 2:** Learners will take turns representing the number on the card using a place value chart.
- **STEP 3:** Other group members will then represent the same number using an abacus. For 87, they will put 8 beads on the Tens rod and 7 beads on the Ones rod.
- **STEP 4:** Learners will complete an exercise in their books where they write the number represented by a drawn abacus or a filled place value chart.

CONCLUSION The teacher will assess understanding by drawing an abacus with beads on the board and asking learners to write down the number it represents.

EXTENDED ACTIVITIES Learners to write their age and the age of a parent and represent both numbers on a drawn abacus.

REFLECTION ON THE LESSON

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WEEK 2**LESSON 1**

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Reading and writing numbers

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Read numbers in symbols, 1-100 both forward and backward.
- Write numbers, 1-100 in symbols.
- Appreciate counting numbers.

KEY INQUIRY QUESTION(S): Can you read the following numbers?

LEARNING RESOURCES:

- Chart
- Flash cards
- Tusome early years (KLB) grade 2 (page 139)

ORGANISATION OF LEARNING: Learners will work individually and in groups.

INTRODUCTION The teacher will lead the class in a choral counting session from 1 to 100 to warm up.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will use flashcards to drill the reading of numbers from 1 to 100.
- **STEP 2:** Learners will practice reading numbers backward from a given number (e.g., from 80 to 70).
- **STEP 3:** The teacher will dictate numbers between 1 and 100, and learners will write the symbols in their exercise books.
- **STEP 4:** In pairs, one learner will write a number, and the other will read it aloud. They will then switch roles.

CONCLUSION The teacher will give a short written quiz, dictating five numbers for the learners to write down in symbols.

EXTENDED ACTIVITIES Learners to write down all the numbers from 50 to 70 in their books.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Reading in symbols

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Read number symbols, 1-100 both forward and backward.
- Write numbers, 1-100 in symbols.
- Appreciate counting numbers.

KEY INQUIRY QUESTION(S): Can you read the following numbers?

LEARNING RESOURCES:

- Chart
- Flash cards
- Tusome early years (KLB) grade 2

ORGANISATION OF LEARNING: Learners will play games to reinforce number recognition.

INTRODUCTION The teacher will review reading numbers by having a quick "around the world" game where learners challenge each other to read number cards.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will lead the class in reading numbers from a 100-grid chart, pointing to them in a random order.
- **STEP 2:** Learners will play "Number Bingo." The teacher will call out numbers, and learners will cover them on their bingo cards.
- **STEP 3:** Learners will practice writing numbers in symbols as the teacher calls them out.
- **STEP 4:** Learners will read number symbols from flash cards presented by the teacher.

CONCLUSION The teacher will assess individual progress by listening to each learner read a row of five random numbers from a chart.

EXTENDED ACTIVITIES Learners to create their own number flashcards for numbers 20-30 at home.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Reading numbers

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Read numbers.
- Write numbers in words and symbols.
- Appreciate reading and writing numbers.

KEY INQUIRY QUESTION(S): Write the following numbers in words: 50, 19, 20, 33.

LEARNING RESOURCES:

- Flash cards
- Chart with numbers and number words
- Tusome early years (KLB) grade 2

ORGANISATION OF LEARNING: Learners will practice writing numbers in words.

INTRODUCTION The teacher will write the numbers 1-10 and their corresponding words on the board to review.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will display a chart showing key number words (e.g., twenty, thirty, forty, fifty, hundred).
- **STEP 2:** The teacher will model how to write a number like 33 in words: "thirty-three".
- **STEP 3:** Learners will practice writing various numbers between 1 and 100 in words in their exercise books (e.g., 50, 19, 20).
- **STEP 4:** The teacher will write number words on the board, and learners will write the corresponding symbols.

CONCLUSION The teacher will give a short dictation, mixing numbers to be written in symbols and words to assess understanding.

EXTENDED ACTIVITIES Learners to write their age in both symbols and words.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Number patterns

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify missing numbers in number patterns from 1-100.
- Work out sums involving missing numbers in number patterns.
- Appreciate number patterns in playing number games.

KEY INQUIRY QUESTION(S): Write the missing number: 40, 50, 60, 70, ____, 90, 100.

LEARNING RESOURCES:

- Counters, charts, marbles
- Flash cards
- Tusome early years (KLB) grade 2 (page 141)

ORGANISATION OF LEARNING: Learners will work individually and in groups.

INTRODUCTION The teacher will start a simple counting pattern (e.g., 5, 10, 15...) and ask learners to continue it, introducing the idea of a "rule" or "pattern".

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will write a number pattern with a missing number on the board (e.g., 40, 50, 60, 70, __, 90, 100).
- **STEP 2:** Learners will first identify the rule of the pattern (e.g., counting forward by 10s).
- **STEP 3:** They will then use the rule to find the missing number (80).
- **STEP 4:** In groups, learners will work on worksheets with different number patterns (counting by 2s, 5s, 10s) to find the missing numbers.

CONCLUSION The teacher will write a pattern on the board and have a volunteer come and fill in the missing number, explaining the rule they used.

EXTENDED ACTIVITIES Learners to create a simple number pattern of their own and ask a family member to solve it.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Number patterns

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify missing numbers in number patterns from 1-100.
- Work out sums involving missing numbers in number patterns.
- Appreciate number patterns in playing number games.

KEY INQUIRY QUESTION(S): Write the missing number: 40, 50, 60, 70, ____, 90, 100.

LEARNING RESOURCES:

- Counters, charts, marbles
- Digital devices
- Tusome Early Years Education pupil's book grade 2

ORGANISATION OF LEARNING: Learners will use digital devices and play games.

INTRODUCTION The teacher will review the concept of number patterns with a quick warm-up problem on the board.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will work on identifying missing numbers in patterns, including patterns that count backward (e.g., 50, 45, 40, __, 30).
- **STEP 2:** The teacher will guide them on how to work out the sums to find the rule (e.g., find the difference between two numbers next to each other).
- **STEP 3:** If digital devices are available, learners will play educational games that involve completing number patterns.
- **STEP 4:** The class can play a "Human Number Pattern" game where learners with number cards line up, leaving a gap for another learner to find their correct position.

CONCLUSION The teacher will give an "exit ticket" problem where each learner must complete a number pattern before the end of the lesson.

EXTENDED ACTIVITIES Learners to complete a number pattern puzzle from their textbook.

REFLECTION ON THE LESSON

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WEEK 3

LESSON 1

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Fractions (1/4)

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify a $\frac{1}{4}$ as part of a whole.
- Make cut-outs from a piece of paper ($\frac{1}{4}$).
- Appreciate the application of fractions in daily life activities.

KEY INQUIRY QUESTION(S): How can you make $\frac{1}{4}$?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 143)
- Manila papers, scissors
- A fruit (e.g., an orange)

ORGANISATION OF LEARNING: Learners will engage in a hands-on paper folding and cutting activity.

INTRODUCTION The teacher will hold up a whole piece of paper ("one whole") and fold it into two equal parts, reviewing the concept of a half. The teacher will then ask what would happen if we fold it again.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Each learner is given a square or circular piece of paper.
- **STEP 2:** The teacher guides them to fold the paper in half, and then fold it in half again.
- **STEP 3:** Learners will open their paper and see that it is divided into four equal parts. The teacher will explain that each part is called a **quarter** or **one-fourth** ($\frac{1}{4}$).
- **STEP 4:** The teacher will demonstrate by cutting an orange into four equal parts, showing that each piece is a quarter of the whole orange.

CONCLUSION Learners will be asked to colour one quarter of their folded paper to show they can identify it.

EXTENDED ACTIVITIES Learners to help a parent cut a chapati or a slice of bread into four equal pieces at home.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Fractions (1/4)

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify a $\frac{1}{4}$ as part of a whole.
- Make cut-outs from a piece of paper ($\frac{1}{4}$).
- Appreciate the application of fractions in daily life activities.

KEY INQUIRY QUESTION(S): How can you make $\frac{1}{4}$?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2
- Manila papers, scissors
- A fruit

ORGANISATION OF LEARNING: Learners will reinforce their understanding of quarters.

INTRODUCTION The teacher will review the previous lesson by showing a shape divided into four parts and asking learners to name one of the parts.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will practice folding different shapes (rectangle, circle) into quarters.
- **STEP 2:** The teacher will draw shapes on the board, some divided into equal quarters and some into unequal parts. Learners will identify which ones show correct quarters.
- **STEP 3:** Learners will make cut-outs by cutting along the folds of their paper to get four separate quarters.
- **STEP 4:** The class will discuss real-life situations where things are divided into quarters (e.g., sharing a pizza, a clock face).

CONCLUSION The teacher will give learners a worksheet with different shapes, and they will be required to shade $\frac{1}{4}$ of each shape.

EXTENDED ACTIVITIES Learners to draw a square and divide it into four equal quarters.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Fractions (1/2)

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify $\frac{1}{2}$ as part of a whole.
- Make cut-outs from a piece of paper.
- Appreciate fractions ($\frac{1}{2}$) as part of a whole.

KEY INQUIRY QUESTION(S): How can you make $\frac{1}{2}$?

LEARNING RESOURCES:

- Manila papers
- A fruit
- Scissors

ORGANISATION OF LEARNING: Learners will participate in a practical folding activity.

INTRODUCTION The teacher will hold up an object, like a piece of chalk, and ask how it can be shared equally between two learners, introducing the concept of a **half** ($\frac{1}{2}$).

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Each learner is given a circular cut-out from manila paper.
- **STEP 2:** The teacher instructs them to fold the circular cut-out into two equal parts.
- **STEP 3:** Learners identify that the paper is now divided into two halves. The teacher explains that one part is called "one-half" and is written as $\frac{1}{2}$.
- **STEP 4:** Learners can cut along the fold to see the two separate halves and then put them back together to form the whole.

CONCLUSION The teacher will draw different shapes on the board, divide them in half, and have learners identify the half that is shaded.

EXTENDED ACTIVITIES Learners to draw three different shapes (a square, a rectangle, a circle) and shade one-half of each.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Fractions (1/2)

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify $\frac{1}{2}$ as part of a whole.
- Make cut-outs from a piece of paper.
- Appreciate fractions ($\frac{1}{2}$) as part of a whole.

KEY INQUIRY QUESTION(S): How can you make $\frac{1}{2}$?

LEARNING RESOURCES:

- Manila papers
- A fruit
- Scissors

ORGANISATION OF LEARNING: Learners will reinforce their understanding of halves.

INTRODUCTION The teacher will review the concept of a half by asking learners to describe it in their own words.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** In pairs, learners are given a rectangular piece of paper. They practice folding it to create two equal halves.
- **STEP 2:** They are encouraged to see if they can fold it in a different way to still get two equal halves (e.g., horizontally and vertically).
- **STEP 3:** The teacher provides real objects (like a piece of string or a leaf) and asks learners to show where half would be.
- **STEP 4:** Learners work on textbook exercises that involve identifying and colouring half of different shapes.

CONCLUSION The teacher will hold a class discussion where learners share examples of things they see in everyday life that are divided into halves.

EXTENDED ACTIVITIES Learners to help with a task at home that involves halving, such as cutting a fruit or vegetable in half.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Addition

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Add a 2-digit number to a 1-digit number without and with regrouping (sum not exceeding 100).
- Work out sums involving the addition of a 2-digit number to a 1-digit number.
- Practice addition of numbers using digital devices.

KEY INQUIRY QUESTION(S): How can you add a 2-digit number to a 1-digit number?

LEARNING RESOURCES:

- Chart, Digital devices
- Tusome Early Years Education (KLB), Grade 2 (Page 147)
- Place value chart, counters

ORGANISATION OF LEARNING: Learners will work individually and in pairs.

INTRODUCTION The teacher will start with simple mental math warm-ups (e.g., $5 + 4$, $10 + 7$) to prepare learners for addition.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1 (Without Regrouping):** The teacher models adding $24 + 3$ using a place value chart. Add the Ones ($4+3=7$), then bring down the Tens (2). The answer is 27.
- **STEP 2 (With Regrouping):** The teacher models adding $27 + 5$. Add the Ones ($7+5=12$). Write down 2 in the Ones column and "carry over" or regroup the 1 ten to the Tens column. Add the Tens ($1+2=3$). The answer is 32.
- **STEP 3:** Learners will work out sums in their books, including a mix of problems with and without regrouping.
- **STEP 4:** If available, learners will practice addition using educational games on digital devices.

CONCLUSION The teacher will write two problems on the board (one with and one without regrouping) and have learners solve them to assess their understanding of both concepts.

EXTENDED ACTIVITIES Learners to create and solve five of their own problems involving adding a 2-digit number to a 1-digit number.

REFLECTION ON THE LESSON

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WEEK 4**LESSON 1**

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Addition

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Add a 2-digit number to a 1-digit number without and with regrouping (sum not exceeding 100).
- Work out sums involving the addition of a 2-digit number to a 1-digit number.
- Practice addition of numbers using digital devices.

KEY INQUIRY QUESTION(S): How can you add a 2-digit number to a 1-digit number?

LEARNING RESOURCES:

- Chart, Digital devices
- Tusome Early Years Education (KLB), Grade 2

ORGANISATION OF LEARNING: Learners will practice addition through various exercises.

INTRODUCTION The teacher will review addition with regrouping by solving one example (e.g., $48 + 6$) with the class.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will work individually on a set of addition problems from their textbook, focusing on neat work and correct alignment of digits.
- **STEP 2:** In pairs, learners will check each other's work.
- **STEP 3:** The teacher will introduce simple word problems involving the addition of a 2-digit number to a 1-digit number (e.g., "Juma has 35 mangoes. His friend gives him 8 more. How many mangoes does he have now?").
- **STEP 4:** Learners will practice solving these word problems.

CONCLUSION The teacher will give a word problem, and learners will be required to write the sum and solve it.

EXTENDED ACTIVITIES Learners to complete a written exercise from their textbook.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Addition

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Add a 2-digit number to a 2-digit number without and with regrouping (sum not exceeding 100).
- Work out sums involving adding a 2-digit number to a 2-digit number.
- Appreciate the addition of numbers.

KEY INQUIRY QUESTION(S): When do we regroup during addition?

LEARNING RESOURCES:

- Chart
- Tusome Early Years Education (KLB), Grade 2
- Place value chart, counters

ORGANISATION OF LEARNING: Learners will be guided through adding two 2-digit numbers.

INTRODUCTION The teacher will build on the previous lessons by asking, "If we can add a 2-digit number to a 1-digit number, can we add a 2-digit number to another 2-digit number?"

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1 (Without Regrouping):** The teacher models adding $43 + 25$. Add the Ones ($3+5=8$), then add the Tens ($4+2=6$). The answer is 68.
- **STEP 2 (With Regrouping):** The teacher models adding $47 + 25$. Add the Ones ($7+5=12$). Write down 2 and regroup the 1 ten. Add the Tens ($1+4+2=7$). The answer is 72. We regroup when the sum in a column is 10 or more.
- **STEP 3:** Learners practice solving problems involving the addition of two 2-digit numbers, both with and without regrouping.
- **STEP 4:** Learners work through sums from their textbook.

CONCLUSION The teacher will write two problems on the board (e.g., $34+51$ and $34+58$) and have learners identify which one requires regrouping and then solve both.

EXTENDED ACTIVITIES Learners to solve a set of written exercises involving the addition of two 2-digit numbers.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Addition

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Add a 2-digit number to a 2-digit number without and with regrouping (sum not exceeding 100).
- Work out sums involving adding a 2-digit number to a 2-digit number.
- Appreciate the addition of numbers.

KEY INQUIRY QUESTION(S): When do we regroup during addition?

LEARNING RESOURCES:

- Chart
- Tusome Early Years Education (KLB), Grade 2
- Counters

ORGANISATION OF LEARNING: Learners will practice addition of two 2-digit numbers.

INTRODUCTION The teacher will start with a quick oral drill of adding two 2-digit numbers that do not require regrouping (e.g., $20+30$, $45+12$).

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will review the process of adding two 2-digit numbers with regrouping.
- **STEP 2:** Learners will work in pairs to solve a set of problems. One learner solves the problem while the other checks the work.
- **STEP 3:** The teacher will provide word problems that require the addition of two 2-digit numbers.
- **STEP 4:** Learners will practice identifying the key information in the word problems and solving them.

CONCLUSION The teacher will give a written exercise to assess individual learners' ability to add two 2-digit numbers accurately.

EXTENDED ACTIVITIES Learners to create one simple word problem for their friend to solve in the next lesson.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Addition

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify missing numbers in a pattern.
- Work out missing numbers in patterns involving the addition of whole numbers up to 100.
- Appreciate the addition of numbers in real-life situations.

KEY INQUIRY QUESTION(S): How do we get the next number in a pattern?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB)
- Chart, digital devices

ORGANISATION OF LEARNING: Learners will explore and solve addition-based number patterns.

INTRODUCTION The teacher will review simple number patterns from Week 2 and explain that today they will focus only on patterns made by adding the same number each time.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher presents a pattern like: 12, 15, 18, __, 24. Learners identify the rule (+3) and the missing number (21).
- **STEP 2:** Learners work in pairs to solve patterns with a missing number in the middle, determining the "add-by" rule first.
- **STEP 3:** The teacher will guide them on how to work out the missing numbers by using addition.
- **STEP 4:** Learners will discuss how addition is used in real-life situations like shopping or counting items.

CONCLUSION The teacher will start a pattern on the board (e.g., 25, 30, 35...) and have learners continue it, explaining the rule (+5).

EXTENDED ACTIVITIES Learners to complete a number pattern worksheet from their textbook.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Addition

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify missing numbers in a pattern.
- Create number patterns involving addition.
- Appreciate the addition of numbers in real-life situations.

KEY INQUIRY QUESTION(S): How do we get the next number in a pattern?

LEARNING RESOURCES:

- Counters, chart, digital devices

ORGANISATION OF LEARNING: Learners will create their own number patterns.

INTRODUCTION The teacher will review how to identify the rule in an addition pattern.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will practice identifying missing numbers in various addition patterns.
- **STEP 2:** The teacher will challenge the learners to create their own number patterns.
- **STEP 3:** In groups, learners will be given a starting number and a rule (e.g., "Start at 20 and add 4 each time"). The groups will write the first five numbers in the pattern.
- **STEP 4:** Groups will write their pattern on a piece of paper, leaving one number missing, and then exchange it with another group to solve.

CONCLUSION The teacher will have a few groups present their created patterns to the class for everyone to solve together.

EXTENDED ACTIVITIES Learners to create a number pattern at home that has at least 6 numbers and write the rule next to it.

REFLECTION ON THE LESSON

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WEEK 5**LESSON 1**

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Subtraction

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner is able to:

- Subtract a 1-digit number from a 2-digit number without regrouping.
- Work out sums involving the subtraction of a 1-digit number from a 2-digit number.

KEY INQUIRY QUESTION(S): When do you regroup during subtraction?

LEARNING RESOURCES:

- Chart, Counters, marbles
- Tusome Early Years Education (KLB), Grade 2 (page 151)

ORGANISATION OF LEARNING: Learners will be guided through subtraction without regrouping.

INTRODUCTION The teacher will start with a simple "taking away" activity using counters to introduce subtraction. The teacher will explain that today, we will only regroup if the top number is smaller, which it won't be in these problems.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher models how to subtract a 1-digit number from a 2-digit number (e.g., $78 - 3$) in vertical format, aligning the Ones column.
- **STEP 2:** The teacher demonstrates subtracting the Ones ($8 - 3 = 5$), and then bringing down the Tens (7). The answer is 75.
- **STEP 3:** Learners are given several problems to work out in their books, focusing on correct column alignment.
- **STEP 4:** In pairs, learners use counters to physically act out the subtraction problems to verify their answers.

CONCLUSION The teacher will give a problem like $59 - 6$ and have learners solve it, explaining the steps to ensure they understand the process.

EXTENDED ACTIVITIES Learners to solve a written exercise from their textbook on subtraction without regrouping.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Subtraction

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Subtract a 2-digit number from a 2-digit number with single regrouping.
- Work out sums involving the subtraction of a 2-digit number from a 2-digit number.

KEY INQUIRY QUESTION(S): When do you regroup during subtraction?

LEARNING RESOURCES:

- Chart, Counters, marbles
- Tusome Early Years Education (KLB), Grade 2

ORGANISATION OF LEARNING: Learners will be guided through the process of subtraction with regrouping.

INTRODUCTION The teacher will ask, "If you have 2 apples and I ask for 5, can you give them to me? What would you need to do?" This introduces the idea of needing to "borrow" or "regroup". You regroup when the top digit in a column is smaller than the bottom digit.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher models a subtraction problem requiring regrouping (e.g., $45 - 18$) using a place value chart and counters.
- **STEP 2:** The teacher shows that you cannot take 8 from 5 in the Ones column. So, you "regroup" one ten from the Tens column (leaving 3 tens). That ten becomes 10 ones, which are added to the existing 5 ones, making it 15 ones.
- **STEP 3:** Now the subtraction can be done: Ones ($15 - 8 = 7$), Tens ($3 - 1 = 2$). The answer is 27.
- **STEP 4:** Learners practice with guided problems like $45 - 13$ (no regrouping) and $45 - 18$ (regrouping) to see the difference.

CONCLUSION The teacher will work through one more example (e.g., $62 - 35$) with the class, asking learners to explain each step of the regrouping process.

EXTENDED ACTIVITIES Learners to complete a worksheet with 5 subtraction problems that require single regrouping.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Subtraction

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Subtract up to 2-digit numbers involving missing numbers with single regrouping.
- Work out sums involving the subtraction of 2-digit numbers with single regrouping.

KEY INQUIRY QUESTION(S): When do you regroup during subtraction?

LEARNING RESOURCES:

- Chart, Counters, marbles
- Tusome Early Years Education (KLB), Grade 2

ORGANISATION OF LEARNING: Learners will practice solving subtraction problems with missing numbers.

INTRODUCTION The teacher will put a simple missing number problem on the board (e.g., $15 - _ = 9$) to introduce the concept of finding a missing part in subtraction.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will present a subtraction problem with a missing number, e.g., $5_ - 15 = 37$. The teacher explains how to work backward or use logic (addition) to find the missing digit.
- **STEP 2:** Learners will focus on the Ones column: $_ - 5 = 7$. This means the missing number must be 2, but that would require regrouping from the Tens. So, it must be $12 - 5 = 7$. The missing digit is 2.
- **STEP 3:** Learners practice more problems involving missing numbers in different positions.
- **STEP 4:** Learners will work through sums from their textbook involving the subtraction of 2-digit numbers with single regrouping to solidify the skill.

CONCLUSION The teacher will give an "exit ticket" with one missing number subtraction problem to assess individual understanding.

EXTENDED ACTIVITIES Learners to create two of their own missing number subtraction problems for a family member to solve.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Subtraction

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify missing numbers in number patterns.
- Use subtraction to work out missing number patterns.
- Appreciate subtraction in real-life situations.

KEY INQUIRY QUESTION(S): How do you identify missing numbers in a pattern?

LEARNING RESOURCES:

- Chart, Counters, marbles
- Tusome Early Years Education (KLB), Grade 2

ORGANISATION OF LEARNING: Learners will work in groups to solve subtraction-based number patterns.

INTRODUCTION The teacher will start a countdown from 30 by 2s (30, 28, 26...) and stop, asking learners what number comes next and what the "rule" is (subtracting 2).

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher writes a subtraction pattern on the board (e.g., 90, 80, 70, __, 50). Learners identify the rule (-10) and the missing number (60).
- **STEP 2:** In groups, learners will work on more complex patterns involving subtraction.
- **STEP 3:** The groups will discuss how to find the rule by finding the difference between two consecutive numbers.
- **STEP 4:** Learners will use subtraction to work out and complete the missing number patterns in their books.

CONCLUSION The teacher will present a pattern and ask learners to explain how they found the rule and how they would find the next three numbers in the sequence.

EXTENDED ACTIVITIES Learners to create a number pattern that starts at 100 and involves subtraction.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Subtraction

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify missing numbers in number patterns.
- Work out missing numbers in number patterns involving subtraction.
- Appreciate subtraction in real-life situations.

KEY INQUIRY QUESTION(S): How do you identify missing numbers in a pattern?

LEARNING RESOURCES:

- Chart, Counters, marbles
- Tusome Early Years Education (KLB), Grade 2

ORGANISATION OF LEARNING: Learners will continue to practice and create subtraction patterns.

INTRODUCTION The teacher will review the previous lesson by giving a quick warm-up pattern on the board for the learners to solve.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will work individually on a worksheet containing various subtraction patterns with missing numbers in different positions.
- **STEP 2:** The teacher will encourage learners to check their answers by applying the rule forward and backward.
- **STEP 3:** In pairs, learners will create their own subtraction pattern and challenge their partner to solve it.
- **STEP 4:** The class will discuss how subtraction patterns are used in real life, such as in a countdown to an event or when using up items from a packet.

CONCLUSION The teacher will have a few pairs present their created patterns to the class, allowing other students to solve them.

EXTENDED ACTIVITIES Learners to complete a set of challenging number pattern problems from their textbook.

REFLECTION ON THE LESSON

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WEEK 6

LESSON 1

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Multiplication

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Model multiplication as repeated addition.
- Work out sums involving multiplication as repeated addition.
- Appreciate multiplication of numbers as repeated addition.

KEY INQUIRY QUESTION(S): How can you work out multiplication using repeated addition?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (page 156)
- Counters, objects, multiplication chart

ORGANISATION OF LEARNING: Learners will work in groups to understand multiplication through addition.

INTRODUCTION The teacher will ask, "If I have 4 groups of 3 balls, how many balls do I have in total?" The teacher will guide learners to solve this by adding $3 + 3 + 3 + 3$, introducing the idea of repeated addition.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will introduce the multiplication sign 'x' and explain that 4×3 means "4 groups of 3".
- **STEP 2:** Learners will use concrete objects to represent multiplication as repeated addition. For 5×2 , they will make 5 groups of 2 counters each.
- **STEP 3:** They will then write the repeated addition sum ($2+2+2+2+2=10$) and the multiplication sum ($5 \times 2=10$).
- **STEP 4:** Learners will work through several examples, converting multiplication problems into repeated addition to find the answer.

CONCLUSION The teacher will write a multiplication sum on the board (e.g., 6×4) and ask learners to write the repeated addition sum and the answer.

EXTENDED ACTIVITIES Learners to draw a picture that represents 3×5 using groups of objects and write the repeated addition sum for it.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Multiplication

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Multiply 1-digit numbers by 1, 2, 3, 4, and 5.
- Multiply 1-digit numbers by 10.
- Appreciate arranging objects in groups of 3s, 4s, 5s.

KEY INQUIRY QUESTION(S): How is multiplication represented as repeated addition?

LEARNING RESOURCES:

- Chart, counters, objects, multiplication chart
- Tusome Early Years Education (KLB), Grade 2

ORGANISATION OF LEARNING: Learners will practice basic multiplication facts.

INTRODUCTION The teacher will review multiplication as repeated addition from the previous lesson.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will focus on building the multiplication tables for 1, 2, 3, 4, and 5 using repeated addition and object groups.
- **STEP 2:** Learners will practice reciting these times tables.
- **STEP 3:** The teacher will introduce multiplying by 10, showing the simple pattern (e.g., $3 \times 10 = 30$, $7 \times 10 = 70$).
- **STEP 4:** Learners will work on a written exercise involving multiplication of single-digit numbers by 1, 2, 3, 4, 5, and 10.

CONCLUSION The teacher will conduct a quick oral quiz on simple multiplication facts to assess memorization and understanding.

EXTENDED ACTIVITIES Learners to practice their 2 and 5 times tables with a family member.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Numbers

SUB-STRAND: Division

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Represent division as equal sharing.
- Divide numbers up to 25 by 4 and 5 without a remainder.
- Appreciate the application of division of numbers.

KEY INQUIRY QUESTION(S): How can you share a given number of objects equally?

LEARNING RESOURCES:

- Chart, counters, objects, multiplication chart
- Tusome Early Years Education (KLB), Grade 2 (page 158)

ORGANISATION OF LEARNING: Learners will explore division through hands-on sharing activities.

INTRODUCTION The teacher will pose a problem: "I have 12 sweets to share equally among 3 friends. How many sweets does each friend get?" This introduces the concept of division as sharing.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** In groups, learners will be given a number of objects (e.g., 20 counters) and asked to share them equally among 4 group members.
- **STEP 2:** They will discover that each person gets 5 counters. The teacher will introduce the division sum: $20 \div 4 = 5$.
- **STEP 3:** Learners will practice organizing numbers up to 25 into equal groups without a remainder (e.g., 15 into groups of 5, 16 into groups of 4).
- **STEP 4:** The teacher will explain the link between division and multiplication (e.g., because $4 \times 5 = 20$, we know that $20 \div 4 = 5$).

CONCLUSION The teacher will give learners a simple word problem about sharing and have them solve it using counters.

EXTENDED ACTIVITIES Learners to solve the problem: "If there are 18 learners and they need to be put into 3 equal teams, how many learners are in each team?" using objects at home.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Measurement

SUB-STRAND: Length

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify the metre as a unit of measuring length.
- Measure length using a fixed unit.
- Appreciate measuring length using fixed units.

KEY INQUIRY QUESTION(S): How is the length of an object measured?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (page 161)
- Metre sticks, strings cut to 1 metre

ORGANISATION OF LEARNING: Learners will engage in practical measurement activities.

INTRODUCTION The teacher will show learners a metre stick and explain that it is a standard unit for measuring longer distances, which helps everyone get the same measurement.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** In groups, learners will make their own 1-metre sticks or use strings cut to exactly one metre.
- **STEP 2:** Learners will use their 1-metre sticks to measure the length and width of various objects within the classroom (e.g., the chalkboard, a desk, the door).
- **STEP 3:** They will record their measurements in metres.
- **STEP 4:** Learners will measure the lengths of different objects at home, record the measurements, and prepare to discuss them in class.

CONCLUSION Groups will share the measurements they took for different items in the classroom, comparing their results to see if they are similar.

EXTENDED ACTIVITIES Learners to estimate the length of a room at home in metres and then use a 1-metre string or stick to check their estimate.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Measurement

SUB-STRAND: Mass

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify the kilogram as a unit of measuring mass.
- Measure the mass of objects in kilograms.
- Appreciate measuring mass using fixed units.

KEY INQUIRY QUESTION(S): Why is it important to know the mass of an object?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 163)
- Beam balance
- 1kg masses, objects to weigh (e.g., books, stones)

ORGANISATION OF LEARNING: Learners will use a beam balance for practical mass measurement.

INTRODUCTION The teacher will let learners hold a 1kg mass and another lighter object to feel the difference, introducing mass as a measure of how heavy something is and the kilogram (kg) as a standard unit.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will guide learners to collect safe materials from the environment for measuring mass.
- **STEP 2:** The teacher will demonstrate how to use an improvised beam balance, explaining that it is balanced when the mass on both sides is equal.
- **STEP 3:** In groups, learners will use the beam balance and 1kg masses to find the mass of different items (e.g., a bag of sand, a stack of books).
- **STEP 4:** They will record their findings.

CONCLUSION The teacher will ask learners to name objects they think have a mass of about 1kg, more than 1kg, and less than 1kg.

EXTENDED ACTIVITIES Learners to look at packaging for items at home (like sugar or flour) and find their mass in kilograms.

REFLECTION ON THE LESSON

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WEEK 7**LESSON 1**

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Measurement

SUB-STRAND: Capacity

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Identify the litre as a unit of measuring capacity.
- Measure capacity in litres.
- Appreciate measuring capacity in litres.

KEY INQUIRY QUESTION(S): Which commodities can be measured in litres?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 165)
- 1-litre bottle, water, bucket, various containers

ORGANISATION OF LEARNING: Learners will engage in a practical activity involving measuring liquids.

INTRODUCTION The teacher will show a 1-litre bottle and explain that a litre (l) is a standard unit for measuring the amount of liquid a container can hold (its capacity). Learners will name commodities measured in litres (e.g., milk, juice, paraffin).

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** In groups, learners will collect containers of different sizes.
- **STEP 2:** The teacher will demonstrate how to measure 1 litre of water using the 1-litre bottle.
- **STEP 3:** Learners will use the 1-litre bottle to find the capacity of other containers, like a bucket or a jug. They do this by counting how many full 1-litre bottles it takes to fill the container.
- **STEP 4:** They will record the capacity of the containers in litres.

CONCLUSION The teacher will ask learners to arrange some containers in order from the one that holds the least to the one that holds the most.

EXTENDED ACTIVITIES Learners to check the capacity of containers at home (like milk cartons or juice bottles) and see how many litres they hold.

REFLECTION ON THE LESSON

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LESSON 2

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Measurement

SUB-STRAND: Time

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner is able to:

- Identify the minute and hour hand in a clock face.
- Read time from the clock face.
- Appreciate keeping time in day-to-day activities.

KEY INQUIRY QUESTION(S): How do we tell time?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 167)
- Clock face (analogue and digital)

ORGANISATION OF LEARNING: Learners will use model clocks to practice telling time.

INTRODUCTION The teacher will show a clock face and ask learners what it is used for. The teacher will introduce the topic of telling time.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** Learners will draw a clock face and identify the short hand as the **hour hand** and the long hand as the **minute hand**.
- **STEP 2:** The teacher will explain that when the minute hand points to 12, it is "o'clock". The teacher will set various "o'clock" times (e.g., 3 o'clock, 7 o'clock) and have learners read them.
- **STEP 3:** The teacher will explain that when the minute hand points to the 6, it is "half past" the hour. Learners will practice reading "half past" times.
- **STEP 4:** The class will discuss how to read, tell, and write time by using both analogue and digital clocks.

CONCLUSION The teacher will set various times on a large clock face and have the class call out the time together.

EXTENDED ACTIVITIES Learners to look at a clock at home at different times (e.g., lunchtime, bedtime) and write down the time.

REFLECTION ON THE LESSON

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LESSON 3

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Measurement

SUB-STRAND: Money

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Add two denominations of money with a sum not exceeding sh.100.
- Use money to buy up to 3 items without a balance.
- Appreciate the use of money in buying items.

KEY INQUIRY QUESTION(S): Name Kenyan currency denominations.

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 169)
- Real or replica Kenyan coins and notes
- Items for a "class shop" with price tags

ORGANISATION OF LEARNING: Learners will participate in a role-playing shop activity.

INTRODUCTION The teacher will show different Kenyan coins and notes and ask learners to identify them and state their value.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** In groups, learners will make paper cut-outs of sh.10 and sh.20 coins, and sh.50 and sh.100 notes.
- **STEP 2:** The teacher will guide learners on how to add two denominations of money (e.g., a 50 shilling note and a 20 shilling coin is 70 shillings). The sum should not exceed sh.100.
- **STEP 3:** The teacher will set up a small "shop" with items priced to allow for exact payment (e.g., an eraser for sh.10, a pencil for sh.20, a book for sh.70).
- **STEP 4:** Learners will be given replica money and will practice buying up to 3 items and calculating the total cost to pay the exact amount.

CONCLUSION The teacher will lead a discussion about the shopping activity and the importance of being able to add money correctly.

EXTENDED ACTIVITIES Learners to find out the price of two small items from a local shop.

REFLECTION ON THE LESSON

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LESSON 4

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Geometry

SUB-STRAND: Lines

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner should be able to:

- Model curved lines in different ways.
- Draw curved lines in different ways.
- Appreciate the use of lines in real-life situations.

KEY INQUIRY QUESTION(S): How are lines used?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 171)
- Clay or plasticine, strings, drawing paper, digital devices

ORGANISATION OF LEARNING: Learners will engage in hands-on activities to create lines.

INTRODUCTION The teacher will draw a straight line and a curved line on the board and ask learners to describe the difference, introducing the topic of lines.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will explain that lines are all around us in art and nature.
- **STEP 2:** Learners will use clay or plasticine to model curved lines in different ways (e.g., waves, spirals, circles).
- **STEP 3:** Learners will then use pencils or crayons to draw different types of curved lines in their books.
- **STEP 4:** If digital devices are available, learners can use a simple drawing application to practice drawing curved lines.

CONCLUSION The teacher will ask learners to look around the classroom and point out examples of curved lines they can see (e.g., on a ball, the shape of a letter 'S').

EXTENDED ACTIVITIES Learners to find and draw three objects at home that have curved lines.

REFLECTION ON THE LESSON

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LESSON 5

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: Geometry

SUB-STRAND: Shapes

SPECIFIC LEARNING OUTCOMES: By the end of the lesson, the learner is able to:

- Identify different shapes in the environment.
- Draw patterns involving different shapes.
- Appreciate the use of shapes in forming patterns in fabrics.

KEY INQUIRY QUESTION(S): Name the shape below?

LEARNING RESOURCES:

- Tusome Early Years Education (KLB), Grade 2 (Page 173)
- Cut-outs of different shapes (circles, squares, triangles, rectangles)
- Examples of patterned fabrics

ORGANISATION OF LEARNING: Learners will identify shapes and create patterns.

INTRODUCTION The teacher will hold up shape cut-outs (circle, square, triangle, rectangle) and have the learners name them to review basic shapes.

LESSON DEVELOPMENT Learners are guided to:

- **STEP 1:** The teacher will lead a discussion where learners identify different shapes in the environment (e.g., the window is a rectangle, the clock is a circle).
- **STEP 2:** The teacher will show examples of patterned fabrics (like a kanga or a shirt) and guide learners to see how shapes are used to create patterns.
- **STEP 3:** Learners will be given cut-outs of different shapes.
- **STEP 4:** They will use the cut-outs to create their own repeating patterns in their books (e.g., circle, square, circle, square...).

CONCLUSION Learners will display their patterns, and the teacher will lead a discussion on the different beautiful patterns they have created using simple shapes.

EXTENDED ACTIVITIES Learners to find a pattern in their home (on clothes, curtains, or a mat) and draw it.

REFLECTION ON THE LESSON

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WEEK 8**LESSON 1-5**

SCHOOL	LEARNING AREA	GRADE	ROLL	TIME
	Mathematics	2		

STRAND: ASSESSMENT

SUB-STRAND: Revision / End of Year Assessment

SPECIFIC LEARNING OUTCOMES: By the end of the week, the learner should be able to:

- Answer questions covering the topics taught during the year.
- Demonstrate an understanding of Numbers, Measurement, and Geometry concepts.

KEY INQUIRY QUESTION(S): What have you learned in Mathematics this year?

LEARNING RESOURCES:

- Revision materials
- Assessment papers
- Pencils, erasers, rulers

ORGANISATION OF LEARNING: Learners will participate in revision activities and then work individually to complete the end-of-year assessment.

INTRODUCTION The teacher will spend the first part of the week reviewing the key topics covered during the term (Numbers, Fractions, Operations, Measurement, Geometry) using fun activities like games and quizzes.

LESSON DEVELOPMENT

- **STEP 1 (Revision):** The teacher leads revision sessions on all the term's topics.
- **STEP 2 (Assessment Instructions):** The teacher distributes the assessment papers and clearly explains all instructions to the learners.
- **STEP 3 (Assessment):** Learners are given a quiet environment and sufficient time to complete the assessment paper independently.
- **STEP 4 (Supervision):** The teacher supervises the assessment, ensuring learners understand the instructions without providing answers.
- **STEP 5 (Collection):** The teacher collects the completed papers at the end of the allocated time.

CONCLUSION The teacher will congratulate the learners on completing their assessment and for their hard work throughout the year. The remaining time can be used for fun math games or puzzles.

EXTENDED ACTIVITIES No extended activities are assigned during the assessment period.

REFLECTION ON THE LESSON

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