REPUBLIC OF KENYA

MINISTRY OF EDUCATION

COMPETENCY-BASED CURRICULUM (CBC)

GRADE 8 MATHEMATICS

TERM 2 LESSON PLANS

2026 (Rationalised CBC)

— PREVIEW —

This is a 2-lesson preview. The full pack contains 36 lesson plans.

Buy the full pack at cbcedukenya.com — KES 300

TEACHER'S NAME	_____
SCHOOL	_____
GRADE	8
TERM	Term 2
YEAR	2026

REFERENCE MATERIALS

1. Mathematics Grade 8 Curriculum Design (KICD)
2. Approved Mathematics Grade 8 Learner's Book
3. Approved Teacher's Guide
4. MTP Mathematics Grade 8

SECTION A: DETAILED LESSON PLANS

The following lesson plans provide a detailed guide for selected lessons across Term 2. All plans follow the rationalised CBC format aligned with the KICD curriculum design for GRADE 8 MATHEMATICS.

LESSON PLAN — WEEK 1, LESSON 1

Strand: **NUMBERS** | Sub-Strand: **Squares & Square Roots**

SCHOOL	_____
LEARNING AREA	Mathematics
GRADE	8
TERM	2
WEEK / LESSON	Week 1 | Lesson 1
STRAND	NUMBERS
SUB-STRAND	Squares & Square Roots
SPECIFIC LEARNING OUTCOMES	By the end of the lesson, the learner should be able to: a) Calculate squares b) Find square roots c) Build technique
KEY INQUIRY QUESTION(S)	What is a square root?
CORE COMPETENCY	Mathematical Reasoning; Critical Thinking; Self-Efficacy
VALUES	Accuracy, Patience, Perseverance
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Financial Literacy
LEARNING RESOURCES	Calculator

ORGANISATION OF LEARNING	
INTRODUCTION	(5 min) Greet the learners warmly and settle them. Briefly recap the previous lesson by asking one or two learners to share something they remember. Introduce today's focus on Squares & Square Roots by writing the key inquiry question on the board: "What is a square root?". Allow two to three learners to give quick answers — accept all responses without correcting yet. Tell learners that by the end of the lesson they will be able to calculate squares. Display the resources for the lesson (Calculator) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Demonstrate. Hold up the relevant resource or write the key term on the board. Ask learners what they already know about it. Note 3-4 learner ideas on the board — these become anchors for the lesson. Link learners' ideas to the SLO: "Calculate squares". Manage the class actively — walk to the back of the room, call on learners by name, and keep the pace brisk so no one drifts.
STEP 2	(8 min) Direct teach with a worked example. Pair drill. Demonstrate one full example on the board, thinking aloud as you go: name the step, do the step, check the step. Pause halfway and ask the class to predict the next step before you reveal it — this is your formative check. Re-state the inquiry question "What is a square root?" and answer it now using the example you just completed. Connect

	explicitly to the SLO: "Find square roots". Invite one or two volunteers to come up and try the next example with you guiding — give immediate corrective feedback.
STEP 3	(8 min) Guided practice in pairs or small groups. practise Squares & Square Roots together in pairs. Distribute the practice task and put learners in pairs of mixed ability. Set a clear time limit (5 minutes for the task, 2 minutes for sharing). Walk around the room and listen in — pick up two pairs whose work is going well and one pair that is stuck. Differentiate as you go: for fast finishers, add a stretch question (e.g. "now try a harder example"); for learners who are stuck, scaffold by working through the first step together. Keep a low murmur in the room — silence usually means confusion, loud chatter usually means off-task.
STEP 4	(7 min) Independent application and formative assessment. apply Squares & Square Roots independently in a short task. Set a short individual task that mirrors the worked example but with different numbers, names, or context. While learners work, circulate and tick exercise books for two things only: did the learner attempt the task, and did they get the core idea right. This gives you a quick read on the class. After 5 minutes, call time and ask three learners to share their answers — choose one strong, one developing, and one who needs support. Affirm progress on the SLO: "Build technique".
CONCLUSION	(5 min) Recap and exit ticket. Ask the whole class three quick questions to verify learning: (1) What is one new word or idea you learned today about Squares & Square Roots? (2) How would you answer "What is a square root?" in one sentence? (3) Where could you use this learning outside the classroom? Take answers from different learners — including the quieter ones. Close by reminding learners of the values for the lesson and previewing the next lesson briefly. Affirm specific learners by name for effort, accuracy, or helpfulness during the lesson.
EXTENDED ACTIVITIES	Set a short, concrete task for home: ask learners to find one example of Squares & Square Roots in their environment (in the home, market, neighbourhood, or community) and bring evidence to the next lesson — a sketch, a written description, or a photograph if available. Fast finishers in class can begin this task immediately as enrichment. Encourage learners to discuss the lesson with a parent, sibling, or guardian — this strengthens learning at home and invites family involvement, which is a core CBC principle.
REFLECTION ON THE LESSON	_____

LESSON PLAN — WEEK 1, LESSON 2

Strand: **NUMBERS** | Sub-Strand: **Cubes & Cube Roots**

SCHOOL	_____
LEARNING AREA	Mathematics
GRADE	8
TERM	2
WEEK / LESSON	Week 1 | Lesson 2
STRAND	NUMBERS
SUB-STRAND	Cubes & Cube Roots
SPECIFIC LEARNING OUTCOMES	By the end of the lesson, the learner should be able to: a) Calculate cubes b) Find cube roots c) Apply
KEY INQUIRY QUESTION(S)	What is a cube root?
CORE COMPETENCY	Mathematical Reasoning; Critical Thinking; Self-Efficacy
VALUES	Accuracy, Patience, Perseverance
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Financial Literacy
LEARNING RESOURCES	Calculator

ORGANISATION OF LEARNING	
INTRODUCTION	(5 min) Greet the learners warmly and settle them. Briefly recap the previous lesson by asking one or two learners to share something they remember. Introduce today's focus on Cubes & Cube Roots by writing the key inquiry question on the board: "What is a cube root?". Allow two to three learners to give quick answers — accept all responses without correcting yet. Tell learners that by the end of the lesson they will be able to calculate cubes. Display the resources for the lesson (Calculator) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Demonstrate. Hold up the relevant resource or write the key term on the board. Ask learners what they already know about it. Note 3-4 learner ideas on the board — these become anchors for the lesson. Link learners' ideas to the SLO: "Calculate cubes". Manage the class actively — walk to the back of the room, call on learners by name, and keep the pace brisk so no one drifts.
STEP 2	(8 min) Direct teach with a worked example. Pair drill. Demonstrate one full example on the board, thinking aloud as you go: name the step, do the step, check the step. Pause halfway and ask the class to predict the next step before you reveal it — this is your formative check. Re-state the inquiry question "What is a cube root?" and answer it now using the example you just completed. Connect explicitly to the SLO: "Find cube roots". Invite one or two volunteers to come up and try the next example with you guiding — give immediate corrective feedback.
STEP 3	(8 min) Guided practice in pairs or small groups. practise Cubes & Cube Roots together in pairs. Distribute the practice task and put learners in pairs of mixed ability. Set a clear time limit (5 minutes

	for the task, 2 minutes for sharing). Walk around the room and listen in — pick up two pairs whose work is going well and one pair that is stuck. Differentiate as you go: for fast finishers, add a stretch question (e.g. "now try a harder example"); for learners who are stuck, scaffold by working through the first step together. Keep a low murmur in the room — silence usually means confusion, loud chatter usually means off-task.
STEP 4	(7 min) Independent application and formative assessment. apply Cubes & Cube Roots independently in a short task. Set a short individual task that mirrors the worked example but with different numbers, names, or context. While learners work, circulate and tick exercise books for two things only: did the learner attempt the task, and did they get the core idea right. This gives you a quick read on the class. After 5 minutes, call time and ask three learners to share their answers — choose one strong, one developing, and one who needs support. Affirm progress on the SLO: "Apply".
CONCLUSION	(5 min) Recap and exit ticket. Ask the whole class three quick questions to verify learning: (1) What is one new word or idea you learned today about Cubes & Cube Roots? (2) How would you answer "What is a cube root?" in one sentence? (3) Where could you use this learning outside the classroom? Take answers from different learners — including the quieter ones. Close by reminding learners of the values for the lesson and previewing the next lesson briefly. Affirm specific learners by name for effort, accuracy, or helpfulness during the lesson.
EXTENDED ACTIVITIES	Set a short, concrete task for home: ask learners to find one example of Cubes & Cube Roots in their environment (in the home, market, neighbourhood, or community) and bring evidence to the next lesson — a sketch, a written description, or a photograph if available. Fast finishers in class can begin this task immediately as enrichment. Encourage learners to discuss the lesson with a parent, sibling, or guardian — this strengthens learning at home and invites family involvement, which is a core CBC principle.
REFLECTION ON THE LESSON	_____

— END OF PREVIEW —

You have viewed 2 of 36 fully-detailed lesson plans. The complete pack covers every week of Term 2 (36 lessons) plus the full Scheme of Work.

Buy the full pack — only KES 300

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SECTION B: SCHEME OF WORK — GRADE 8 MATHEMATICS TERM 2

School: _____ Teacher: _____ Year: 2026

WK	LSN	STRAND	SUB-STRAND	SPECIFIC LEARNING OUTCOMES	KEY INQUIRY QUESTION(S)	LEARNING EXPERIENCES	LEARNING RESOURCES	ASSESSMENT METHODS
1	1	Numbers	Squares & Square Roots	a) Calculate squares b) Find square roots c) Build technique	What is a square root?	Demonstrate; pair drill	Calculator	Written, peer
1	2	Numbers	Cubes & Cube Roots	a) Calculate cubes b) Find cube roots c) Apply	What is a cube root?	Demonstrate; pair drill	Calculator	Written, peer
1	3	Numbers	Indices	a) State laws b) Apply c) Build technique	How exponents work?	Worked examples	Exercise book	Written, oral
2	1	Numbers	Standard Form	a) Express in standard form b) Convert c) Apply	How write large/small numbers?	Worked examples	Calculator	Written, peer
2	2	Numbers	Operations on Standard Form	a) Add b) Multiply c) Apply	How operate?	Demonstrate	Calculator	Written, peer
2	3	Numbers	Logarithms Introduction	a) Define b) Convert c) Build foundation	What is logarithm?	Connect to indices	Calculator	Written, oral
3	1	Algebra	Linear Equations	a) Solve b) Apply to word problems c) Build technique	How find unknown?	Worked examples	Exercise book	Written, oral
3	2	Algebra	Equations with Brackets	a) Expand brackets b) Solve c) Apply	How handle brackets?	Step-by-step	Exercise book	Written, peer
3	3	Algebra	Equations with Fractions	a) Solve fractional equations b) Apply c) Build technique	How handle fractions?	Worked examples	Exercise book	Written, peer
4	1	Algebra	Inequalities	a) Solve b) Number line c) Apply	How differ from equations?	Compare; solve	Number line	Written, observation
4	2	Algebra	Compound Inequalities	a) Solve compound b) Represent c) Build reasoning	How handle two together?	Worked examples	Number line	Written, peer
4	3	Algebra	Word Problems	a) Apply to budgets b) Apply to capacity c) Apply	When use inequalities?	Real contexts	Problem cards	Written, oral
5	1	Algebra	Quadratic Expressions	a) Identify b) Expand c) Build skills	What is quadratic?	Identify; expand	Exercise book	Written, oral
5	2	Algebra	Factorising	a) Factorise simple quadratics b) Use grouping c) Build skill	How factorise x^2+5x+6?	Worked examples	Exercise book	Written, peer
5	3	Algebra	Solving Quadratics	a) Solve by factorisation b) Verify c) Build technique	How use factorisation?	Set =0; factorise	Exercise book	Written, oral

6	1	Geometry	Angles in Polygons	a) Sum of interior angles b) Calculate c) Build reasoning	How find sum?	Formula (n-2)×180	Polygon shapes	Written, observation
6	2	Geometry	Exterior Angles	a) Sum of exterior b) Calculate c) Apply	What is sum of exterior?	Demonstrate (360°)	Polygon shapes	Written, oral
6	3	Geometry	Triangles	a) Angle sum b) Exterior angle property c) Apply	How triangles relate?	Demonstrate	Geometry set	Written, observation
7	1	Geometry	Pythagoras	a) State theorem b) Apply c) Verify	How find missing side?	Demonstrate	Calculator	Written, oral
7	2	Geometry	Pythagoras Applications	a) Real-world b) Solve c) Connect	How builders use?	Real applications	Problem cards	Written, peer
7	3	Geometry	Trigonometry Introduction	a) Identify ratios b) Define c) Build foundation	What are sin/cos/tan?	SOH-CAH-TOA	Calculator	Written, oral
8	1	Geometry	Using Trig	a) Find angles b) Find sides c) Apply	How find unknown?	Worked examples	Calculator	Written, peer
8	2	Geometry	Trig Word Problems	a) Apply to height/distance b) Solve c) Connect	How surveyors measure?	Discuss; pair solve	Problem cards	Written, oral
8	3	Geometry	Circles	a) Define parts b) Sketch c) Build vocabulary	What are parts of circle?	Sketch; label	Compass	Written, observation
9	1	Statistics	Data Collection	a) Use questionnaires b) Use observation c) Build research	How collect data?	Design questionnaire	Templates	Observation, written
9	2	Statistics	Frequency Tables	a) Organise b) Calculate frequencies c) Build organisation	How organise raw data?	Worked examples	Sample data	Written, peer
9	3	Statistics	Mean, Median, Mode	a) Calculate b) Compare c) Build judgment	What is "average"?	Worked examples	Sample data	Written, oral
10	1	Statistics	Bar Graphs	a) Draw b) Read c) Build literacy	How visualise?	Worked example	Graph paper	Practical, peer
10	2	Statistics	Pie Charts	a) Calculate sectors b) Draw c) Apply	How show parts of whole?	Calculate angles	Compass, paper	Practical, peer
10	3	Statistics	Line Graphs	a) Plot b) Interpret c) Build analysis	How show change?	Plot data	Graph paper	Written, oral
11	1	Probability	Introduction	a) Define b) Range 0-1 c) Build foundation	What is probability?	Define; examples	Coin, dice	Oral, observation
11	2	Probability	Calculating	a) Calculate P b) Apply c) Build technique	How calculate?	Worked examples	Coin, dice	Written, peer
11	3	Probability	Word Problems	a) Apply to life b) Solve c) Apply	How use daily?	Story problems	Problem cards	Written, oral
12	1	All Strands	Term 2	a) Recap b) Use strategies	What did we	Pair quiz	Materials	Oral, peer

			Revision	c) Show progress	learn?			
12	2	All Strands	Term 2 Revision	a) Apply b) Show skills c) Self-assess	How use this?	Practical tasks	Materials	Observation, oral
12	3	All Strands	Term 2 Assessment	a) Demonstrate b) Reflect c) Build readiness	Am I ready?	Assessment	Assessment paper	Written, self-assessment