Grade 5 Mathematics

Term 2 - 48 complete lesson plans

Ready to teach, in the KICD lesson-plan format | 35-minute lessons | PDF and editable Word

ABOUT THIS PACK

48 complete, ready-to-teach Grade 5 Mathematics lesson plans for Term 2, covering decimals, simple equations, length, area, volume and capacity.

TOPICS IN THIS PACK

Topic	Name	Lessons
1.7	Decimals	6
1.8	Simple Equations	6
2.1	Length	12
2.2	Area	6
2.3	Volume	6
2.4	Capacity	12

INSIDE EVERY LESSON PLAN

- The specific learning outcomes, key inquiry question, core competencies, values and PCIs, and the resources needed.
- A timed lesson flow: what the teacher does and what the learners do, from introduction to summary.
- The key content (a worked example, notes or a practical with its expected results), then four practice questions with the answers for the teacher.
- The common mistake to watch for, and ideas for learners who need support and for those ready for more.
- A four-level CBC assessment rubric (EE, ME, AE, BE), homework, and a blank reflection space to fill in after teaching.

A TASTE OF LESSON 1

Place value of decimals up to thousandths

By the end of the lesson, the learner should be able to: a) name the tenths, hundredths and thousandths places; b) write the place value and total value of a digit in a decimal

> **Place value in 9.856**
> Ones 9 | decimal point | tenths 8 | hundredths 5 | thousandths 6.
> The total value of 8 is 8 tenths (0.8), of 5 is 5 hundredths (0.05) and of 6 is 6 thousandths (0.006).

You also receive this pack as an editable Word file, so you can change any lesson to suit your class before you print it. Lessons follow the order of the KICD curriculum design.

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ELIMU254

Place value of decimals up to thousandths

Strand 1.0 Numbers > Sub-strand 1.7 Decimals | Lesson 1 of 6 | 35 minutes

SCHOOL	TEACHER	DATE
CLASS / STREAM	TIME	ROLL (B / G)

SPECIFIC LEARNING OUTCOME(S)

By the end of the lesson, the learner should be able to: a) name the tenths, hundredths and thousandths places; b) write the place value and total value of a digit in a decimal

KEY INQUIRY QUESTION(S)

- Where can you use decimals in real life?
- What is the importance of ordering decimals?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Critical thinking and problem solving**	Learners choose a method, check their answers and give reasons for their choices.
COMPETENCY	**Digital literacy**	Learners use a phone, tablet or the class computer to explore or check the idea.
VALUE	**Unity**	Learners share materials fairly and work as one team.
VALUE	**Social justice**	Every learner gets a turn and a fair chance to answer.
PCI	**Social cohesion**	Learners work in harmony, include everyone and settle differences peacefully.
PCI	**Financial literacy**	Examples use shillings and cents, shopping, saving and simple budgets.

LEARNING RESOURCES

Decimal place value chart | Metre rule marked in centimetres and millimetres | Price tags and supermarket receipts | Number cards and a decimal point card | Calculator (for checking only) | Learners' exercise books

ORGANISATION OF LEARNING

Whole class for the introduction and the summary; pairs or groups of four to five for guided practice; individual work for the independent tasks.

KEY WORDS

decimal | decimal point | tenths | hundredths | thousandths | place value | ascending | descending

THE LESSON AT A GLANCE

Introduction	Teacher models	Guided practice	On their own	Wrap-up
5 min	8 min	9 min	8 min	5 min

LESSON FLOW

Stage	Minutes	The teacher	The learners
Introduction	5	Greet the class and ask: "An athlete ran 100 m in 9.856 seconds. What do the digits after the point mean?" Take two or three answers, link them to earlier work, then state today's outcome.	Answer the starter question, recall what they already know and read the outcome aloud.
Step 1: Teacher models	8	Work through the worked example on the next page, thinking aloud. Use decimal place value chart, metre rule marked in centimetres and millimetres, price tags and supermarket receipts. Ask learners to predict each step before you show it.	Watch, predict the next step, ask questions and note the key steps in their exercise books.
Step 2: Guided practice	9	Give questions 1 and 2. Move round the groups, ask "How do you know?" and correct errors kindly on the spot.	Work in pairs or small groups, explain each step to a partner and check one another's answers.
Step 3: Independent practice	8	Set questions 3 and 4 for individual work. Mark as you walk round and note who needs help in the next lesson.	Work on their own, then swap books with a partner to check.
Summary and conclusion	5	Ask two or three learners to state the key idea in their own words. Give this exit question and check the answers: "Write 5 + 0.3 + 0.02 + 0.001 as one decimal."	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Place value in 9.856

Ones 9 | decimal point | tenths 8 | hundredths 5 | thousandths 6.

The total value of 8 is 8 tenths (0.8), of 5 is 5 hundredths (0.05) and of 6 is 6 thousandths (0.006).

Check: 9 + 0.8 + 0.05 + 0.006 = 9.856.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Write the place value of 4 in 2.437.	**Tenths**
2	Write the place value of 9 in 0.159.	**Thousandths**
3	Write the total value of 7 in 3.072.	**0.07 (7 hundredths)**
4	Write 5 + 0.3 + 0.02 + 0.001 as one decimal.	**5.321**

WATCH OUT FOR

Learners call the first place after the point "tens" and the second "hundreds". After the point the places end in -ths: tenths, hundredths, thousandths.

ASSESSMENT RUBRIC - THE FOUR CBC LEVELS

Level	What the learner can do
Exceeds expectations (EE)	Can name the tenths, hundredths and thousandths places confidently and accurately, explain the method used, and apply the idea to new or unfamiliar problems.
Meets expectations (ME)	Can name the tenths, hundredths and thousandths places accurately in familiar situations; notices and corrects slips without help.
Approaches expectations (AE)	Can partly name the tenths, hundredths and thousandths places, or does so with prompts from the teacher or a partner; makes some errors.
Below expectations (BE)	Cannot yet name the tenths, hundredths and thousandths places without direct help; needs the idea taught again with concrete objects.

SUPPORT AND EXTENSION

Learners who need support	On a metre rule, show 1 m, 0.1 m (10 cm), 0.01 m (1 cm) and 0.001 m (1 mm).
Learners ready for more	Write a decimal with 3 in the tenths place, 0 in the hundredths place and 8 in the thousandths place, and a whole number part of 12. (Answer: 12.308)
Inclusion	Seat learners with low vision near the board and read aloud whatever you write; use large, clear, tactile materials; allow extra time; pair with a patient partner; use gestures or Kenyan Sign Language for the key words.

HOMEWORK AND FOLLOW-UP

Redo questions 3 and 4 neatly in the exercise book. Then tell someone at home what you learned about "place value of decimals up to thousandths" and bring one question of your own to ask next lesson.

TEACHER SELF-CHECK

- Did every learner get a turn to handle materials or explain their thinking?
- Did most learners meet the outcome? Write down the names of those who did not.
- Was the pace right — did any step take too long or too short a time?
- Which competency and value did I see learners showing?
- What will I change the next time I teach this lesson?

REFLECTION ON THE LESSON / SELF-REMARKS

Write this after teaching - what worked, what to change, which learners need follow-up.

ELIMU254

Ordering decimals up to thousandths

Strand 1.0 Numbers > Sub-strand 1.7 Decimals | Lesson 2 of 6 | 35 minutes

SCHOOL	TEACHER	DATE
CLASS / STREAM	TIME	ROLL (B / G)

SPECIFIC LEARNING OUTCOME(S)

By the end of the lesson, the learner should be able to: a) compare decimals place by place from the left; b) arrange decimals in ascending and descending order

KEY INQUIRY QUESTION(S)

- Where can you use decimals in real life?
- What is the importance of ordering decimals?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Critical thinking and problem solving**	Learners choose a method, check their answers and give reasons for their choices.
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THE LESSON AT A GLANCE

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LESSON FLOW

Stage	Minutes	The teacher	The learners
Introduction	5	Greet the class and ask: "Key question: what is the importance of ordering decimals? Three runners finished in 12.45 s, 12.405 s and 12.5 s. Who won?" Take two or three answers, link them to earlier work, then state today's outcome.	Answer the starter question, recall what they already know and read the outcome aloud.
Step 1: Teacher models	8	Work through the worked example on the next page, thinking aloud. Use decimal place value chart, metre rule marked in centimetres and millimetres, price tags and supermarket receipts. Ask learners to predict each step before you show it.	Watch, predict the next step, ask questions and note the key steps in their exercise books.
Step 2: Guided practice	9	Give questions 1 and 2. Move round the groups, ask "How do you know?" and correct errors kindly on the spot.	Work in pairs or small groups, explain each step to a partner and check one another's answers.
Step 3: Independent practice	8	Set questions 3 and 4 for individual work. Mark as you walk round and note who needs help in the next lesson.	Work on their own, then swap books with a partner to check.
Summary and conclusion	5	Ask two or three learners to state the key idea in their own words. Give this exit question and check the answers: "Arrange in ascending order: 1.009, 1.09, 1.9, 1.019."	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Ordering 12.45, 12.405 and 12.5

Give each number three decimal places by adding zeros: 12.450, 12.405, 12.500. Adding zeros at the end does not change a decimal.

Compare the tenths: 4, 4, 5. Then the hundredths of the first two: 5 and 0.

Ascending: 12.405, 12.45, 12.5. The runner with 12.405 s won because the smallest time is the fastest.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Arrange in ascending order: 0.7, 0.07, 0.707.	**0.07, 0.7, 0.707**
2	Arrange in descending order: 3.25, 3.205, 3.3.	**3.3, 3.25, 3.205**
3	Which is greater: 0.45 or 0.405?	**0.45**
4	Arrange in ascending order: 1.009, 1.09, 1.9, 1.019.	**1.009, 1.019, 1.09, 1.9**

WATCH OUT FOR

Learners think 0.405 is bigger than 0.45 because 405 is bigger than 45. Fill the empty places with zeros first: 0.450 and 0.405.