Grade 5 Mathematics

Term 1 - 52 complete lesson plans

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

ABOUT THIS PACK

52 complete, ready-to-teach Grade 5 Mathematics lesson plans for Term 1, covering whole numbers, addition, subtraction, multiplication, division and fractions.

TOPICS IN THIS PACK

Topic	Name	Lessons
1.1	Whole Numbers	20
1.2	Addition	6
1.3	Subtraction	6
1.4	Multiplication	6
1.5	Division	6
1.6	Fractions	8

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 up to hundreds of thousands

By the end of the lesson, the learner should be able to: a) name the place of each digit in a 6-digit number; b) build a 6-digit number on a place value chart

> **Placing 254,318 on a place value chart**
> Hundred thousands 2 | Ten thousands 5 | Thousands 4 | Hundreds 3 | Tens 1 | Ones 8.
> Read the places from the right: ones, tens, hundreds, then thousands, ten thousands, hundred thousands.

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 up to hundreds of thousands

Strand 1.0 Numbers > Sub-strand 1.1 Whole Numbers | Lesson 1 of 20 | 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 place of each digit in a 6-digit number; b) build a 6-digit number on a place value chart

KEY INQUIRY QUESTION(S)

- Where can we use ordering of numbers in real life?
- Why should we round off numbers?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Communication and collaboration**	Learners explain their thinking to a partner and report their findings to the group.
COMPETENCY	**Critical thinking and problem solving**	Learners choose a method, check their answers and give reasons for their choices.
COMPETENCY	**Learning to learn**	Learners say what they found easy or hard and decide their next step.
VALUE	**Unity**	Learners share materials fairly and work as one team.
VALUE	**Responsibility**	Learners look after shared materials and finish every task.
PCI	**Safety**	Learners follow safety rules when using materials and moving about.
PCI	**Financial literacy**	Examples use shillings and cents, shopping, saving and simple budgets.

LEARNING RESOURCES

Place value chart up to hundreds of thousands drawn on manila paper | Number cards 0 to 9 | Abacus or bottle tops | Number line drawn on the floor or chalkboard | Newspaper cuttings with large numbers | 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

digit | place value | total value | hundreds of thousands | ascending | descending | round off | divisible | divisibility test

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: "A county had 254,318 registered voters. Which digit tells us the hundreds of thousands? How do you know?" 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 place value chart up to hundreds of thousands drawn on manila paper, number cards 0 to 9, abacus or bottle tops. 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 a 6-digit number with 4 in the hundred thousands place and 0 in every other place."	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Placing 254,318 on a place value chart

Hundred thousands 2 | Ten thousands 5 | Thousands 4 | Hundreds 3 | Tens 1 | Ones 8.

Read the places from the right: ones, tens, hundreds, then thousands, ten thousands, hundred thousands.

The comma separates the thousands group (254) from the ones group (318), which helps us read the number.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Write the place value of 7 in 703,215.	**Hundred thousands**
2	Write the place value of 6 in 418,962.	**Hundreds**
3	In 539,104, which digit is in the ten thousands place?	**3**
4	Write a 6-digit number with 4 in the hundred thousands place and 0 in every other place.	**400,000**

WATCH OUT FOR

Learners name the digit instead of the place ("the place value of 7 is 7"). Keep asking: which column is the digit standing in?

ASSESSMENT RUBRIC - THE FOUR CBC LEVELS

Level	What the learner can do
Exceeds expectations (EE)	Can name the place of each digit in a 6-digit number confidently and accurately, explain the method used, and apply the idea to new or unfamiliar problems.
Meets expectations (ME)	Can name the place of each digit in a 6-digit number accurately in familiar situations; notices and corrects slips without help.
Approaches expectations (AE)	Can partly name the place of each digit in a 6-digit number, or does so with prompts from the teacher or a partner; makes some errors.
Below expectations (BE)	Cannot yet name the place of each digit in a 6-digit number without direct help; needs the idea taught again with concrete objects.

SUPPORT AND EXTENSION

Learners who need support	Let the learner place number cards on a 6-column chart and say each column name aloud before reading the number.
Learners ready for more	Using the digits 9, 0, 3, 5, 1 and 8 once each, make the largest 6-digit number. (Answer: 985,310)
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 up to hundreds of thousands" 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

Total value of a digit

Strand 1.0 Numbers > Sub-strand 1.1 Whole Numbers | Lesson 2 of 20 | 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) find the total value of a digit as the digit times its place value; b) show that the total values add up to the number

KEY INQUIRY QUESTION(S)

- Where can we use ordering of numbers in real life?
- Why should we round off numbers?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Communication and collaboration**	Learners explain their thinking to a partner and report their findings to the group.
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KEY WORDS

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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: "In 254,318 the 5 is in the ten thousands place. Is it worth 5 or more? How much more?" 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 place value chart up to hundreds of thousands drawn on manila paper, number cards 0 to 9, abacus or bottle tops. 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.
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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 700,000 + 40,000 + 2,000 + 500 + 6 as one number."	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Total value = digit × value of its place
In 254,318: 2 × 100,000 = 200,000; 5 × 10,000 = 50,000; 4 × 1,000 = 4,000.
3 × 100 = 300; 1 × 10 = 10; 8 × 1 = 8.
Check: 200,000 + 50,000 + 4,000 + 300 + 10 + 8 = 254,318.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	What is the total value of 6 in 461,027?	**60,000**
2	What is the total value of 9 in 309,452?	**9,000**
3	What is the total value of 3 in 3,581?	**3,000**
4	Write 700,000 + 40,000 + 2,000 + 500 + 6 as one number.	**742,506**

WATCH OUT FOR

Place value is the name of the column (ten thousands); total value is a number (50,000). Do not let learners answer one when asked for the other.