Grade 6 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 6 Mathematics lesson plans for Term 2, covering inequalities, length, area, capacity and mass.

TOPICS IN THIS PACK

Topic	Name	Lessons
1.6	Inequalities	8
2.1	Length	14
2.2	Area	6
2.3	Capacity	6
2.4	Mass	14

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

Inequality symbols

By the end of the lesson, the learner should be able to: a) read the symbols >, <, >= and <=; b) use them with numbers

> **Symbols**
> > means greater than: 9 > 4.
> < means less than: 3 < 7.

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

Inequality symbols

Strand 1.0 Numbers > Sub-strand 1.6 Inequalities | Lesson 1 of 8 | 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) read the symbols >, <, >= and <=; b) use them with numbers

KEY INQUIRY QUESTION(S)

- How do we solve simple inequalities?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Self-efficacy**	Learners attempt each task with confidence and see that effort improves results.
COMPETENCY	**Critical thinking and problem solving**	Learners choose a method, check their answers and give reasons for their choices.
VALUE	**Responsibility**	Learners look after shared materials and finish every task.
VALUE	**Integrity**	Learners record their own honest results and mark work truthfully.
PCI	**Social cohesion**	Learners work in harmony, include everyone and settle differences peacefully.
PCI	**Safety**	Learners follow safety rules when using materials and moving about.

LEARNING RESOURCES

Number line chart | Symbol cards (>, <, >=, <=) | Real-life signs (speed limits, age limits) | 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

inequality | unknown | greater than (>) | less than (<) | at least (>=) | at most (<=) | simplify | solve | number line

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: "Key question: how do we solve simple inequalities? A sign says "Speed limit 50 km/h". What speeds are allowed?" 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 number line chart, symbol cards (>, <, >=, <=), real-life signs (speed limits, age limits). 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: "Is 50 allowed if s <= 50?"	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Symbols
> means greater than: 9 > 4.
< means less than: 3 < 7.
>= means greater than or equal to (at least).
<= means less than or equal to (at most).
A speed s is allowed if s <= 50.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Read "k > 6" in words.	**k is greater than 6.**
2	Write "m is at most 20" using a symbol.	**m <= 20**
3	Write "a is at least 18" using a symbol.	**a >= 18**
4	Is 50 allowed if s <= 50?	**Yes.**

WATCH OUT FOR

The symbol opens towards the larger side.

ASSESSMENT RUBRIC - THE FOUR CBC LEVELS

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

SUPPORT AND EXTENSION

Learners who need support	Use symbol cards with arrows.
Learners ready for more	Give three whole numbers that satisfy n < 4. (Answer: For example 1, 2 and 3)
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 "inequality symbols" 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

Forming inequalities from words

Strand 1.0 Numbers > Sub-strand 1.6 Inequalities | Lesson 2 of 8 | 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) form simple inequalities in one unknown from statements; b) choose the correct symbol

KEY INQUIRY QUESTION(S)

- How do we solve simple inequalities?

CORE COMPETENCIES, VALUES AND PCIS IN THIS LESSON

COMPETENCY	**Self-efficacy**	Learners attempt each task with confidence and see that effort improves results.
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: "A lift can carry at most 8 people. How can we write this with a letter?" 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 number line chart, symbol cards (>, <, >=, <=), real-life signs (speed limits, age limits). 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: a price c is at least Ksh 500."	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Words to inequalities

Let p be the number of people: p <= 8.

A learner must be more than 12 years old: a > 12.

A bag of maize weighs at least 90 kg: w >= 90.

A number plus 5 is less than 20: n + 5 < 20.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Write: a number t increased by 3 is greater than 10.	**t + 3 > 10**
2	Write: twice a number m is at most 16.	**2m <= 16**
3	Write: a bus carries fewer than 62 passengers, p.	**p < 62**
4	Write: a price c is at least Ksh 500.	**c >= 500**

WATCH OUT FOR

Key phrases: "at most" is <=, "at least" is >=, "more than" is >, "fewer than" is <.