# Grade 1 Mathematics

## Term 3 - 50 complete lesson plans

Ready to teach, in the KICD lesson-plan format | 30-minute lessons | PDF and editable Word

### ABOUT THIS PACK

50 complete, ready-to-teach Grade 1 Mathematics lesson plans for Term 3, covering mass, capacity, time, money, lines and shapes.

### TOPICS IN THIS PACK

| Topic | Name | Lessons |
|---|---|---|
| 2.2 | Mass | 10 |
| 2.3 | Capacity | 12 |
| 2.4 | Time | 8 |
| 2.5 | Money | 8 |
| 3.1 | Lines | 6 |
| 3.2 | Shapes | 6 |

### 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

**Heavy and light objects**

By the end of the lesson, the learner should be able to collect and sort heavy and light objects

> **Heavy and light**
> Collect safe objects and lift each one: a stone, a book, a leaf, a feather, a bottle of water. Sort them into heavy and light.
> Lift with bent knees and a straight back.

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.

## CONTENTS


| No. | Lesson | Topic | Page |
|---|---|---|---|
| 1 | Heavy and light objects | 2.2 Mass | 4 |
| 2 | Heavier than and lighter than | 2.2 Mass | 7 |
| 3 | Bigger is not always heavier | 2.2 Mass | 10 |
| 4 | Using a beam balance | 2.2 Mass | 13 |
| 5 | Comparing with the textbook | 2.2 Mass | 16 |
| 6 | Measuring mass with bottle tops | 2.2 Mass | 19 |
| 7 | Measuring mass with stones | 2.2 Mass | 22 |
| 8 | Ordering by mass | 2.2 Mass | 25 |
| 9 | Mass in daily life | 2.2 Mass | 28 |
| 10 | Mass review | 2.2 Mass | 31 |
| 11 | Collecting containers | 2.3 Capacity | 34 |
| 12 | Full, empty and half full | 2.3 Capacity | 37 |
| 13 | Which holds more? | 2.3 Capacity | 40 |
| 14 | Holds the same | 2.3 Capacity | 43 |
| 15 | Tall and wide containers | 2.3 Capacity | 46 |
| 16 | Measuring with cups | 2.3 Capacity | 49 |
| 17 | Measuring with spoons and tins | 2.3 Capacity | 52 |
| 18 | Comparing capacities with units | 2.3 Capacity | 55 |
| 19 | Ordering by capacity | 2.3 Capacity | 58 |
| 20 | Saving water | 2.3 Capacity | 61 |
| 21 | Re-using containers | 2.3 Capacity | 64 |
| 22 | Capacity review | 2.3 Capacity | 67 |
| 23 | The days of the week | 2.4 Time | 70 |
| 24 | Today, yesterday and tomorrow | 2.4 Time | 73 |
| 25 | School days and the weekend | 2.4 Time | 76 |
| 26 | Days and activities | 2.4 Time | 79 |
| 27 | The months of the year | 2.4 Time | 82 |
| 28 | Months and special days | 2.4 Time | 85 |
| 29 | Reading the calendar | 2.4 Time | 88 |
| 30 | Time review | 2.4 Time | 91 |
| 31 | Kenyan coins | 2.5 Money | 94 |
| 32 | The fifty-shilling note | 2.5 Money | 97 |

| | | | |
|---|---|---|---|
| 33 | How we identify coins and notes | 2.5 Money | 100 |
| 34 | Counting coins of one kind | 2.5 Money | 103 |
| 35 | Prices in the classroom shop | 2.5 Money | 106 |
| 36 | Buying one item | 2.5 Money | 109 |
| 37 | Buying two items | 2.5 Money | 112 |
| 38 | Money review | 2.5 Money | 115 |
| 39 | Making a straight line with our bodies | 3.1 Lines | 118 |
| 40 | Drawing straight lines | 3.1 Lines | 121 |
| 41 | Curved lines | 3.1 Lines | 124 |
| 42 | Drawing curved lines | 3.1 Lines | 127 |
| 43 | Lines around us | 3.1 Lines | 130 |
| 44 | Lines review | 3.1 Lines | 133 |
| 45 | Rectangles and triangles | 3.2 Shapes | 136 |
| 46 | Circles and ovals | 3.2 Shapes | 139 |
| 47 | Shape hunt | 3.2 Shapes | 142 |
| 48 | Making shape patterns | 3.2 Shapes | 145 |
| 49 | Patterns on fabrics | 3.2 Shapes | 148 |
| 50 | Designing a fabric pattern | 3.2 Shapes | 151 |

ELIMU254

# Heavy and light objects

Strand 2.0 Measurement > Sub-strand 2.2 Mass | Lesson 1 of 10 | 30 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 collect and sort heavy and light objects

## KEY INQUIRY QUESTION(S)

- How can you compare the mass of two or more objects?
- How can you show that an object is heavier than, lighter than or the same as your mathematics textbook?

## 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 | **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 | **Respect** | Learners listen while others explain and accept correction politely. |
| PCI | **Safety issues** | Learners follow safety rules when using materials and moving about. |
| PCI | **Effective communication** | Developed through the activities in this lesson. |

## LEARNING RESOURCES

Objects of different masses (stones, books, bottles of water, leaves) | A simple beam balance (a stick hung by its middle with a tin at each end) | Bottle tops, stones or marbles as measuring units

## 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

heavy | light | heavier than | lighter than | same as | mass | balance | weigh

## THE LESSON AT A GLANCE

| Introduction | Teacher models | Guided practice | On their own | Wrap-up |
|---|---|---|---|---|
| 4 min | 7 min | 8 min | 7 min | 4 min |

## LESSON FLOW

| Stage | Minutes | The teacher | The learners |
|---|---|---|---|
| **Introduction** | 4 | Greet the class and ask: "Lift a book and a leaf. Which is heavy?" 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** | 7 | Take learners through "Heavy and light" (learning activity on the next page), explaining as you go. Use objects of different masses (stones, books, bottles of water, leaves), a simple beam balance (a stick hung by its middle with a tin at each end), bottle tops, stones or marbles as measuring units. Ask learners to predict what comes next before you show it. | Watch, predict the next step, ask questions and note the key steps in their exercise books. |
| **Step 2: Guided practice** | 8 | 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** | 7 | 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** | 4 | Ask two or three learners to state the key idea in their own words. Give this exit question and check the answers: "How do we lift safely?" | Say the key idea in their own words and answer the exit question in the exercise book. |

## LEARNING ACTIVITY

**Heavy and light**

Collect safe objects and lift each one: a stone, a book, a leaf, a feather, a bottle of water. Sort them into heavy and light.

Lift with bent knees and a straight back.

## PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

| No. | Question | Answer |
|---|---|---|
| 1 | Is a stone heavy or light? | **Heavy (answers vary)** |
| 2 | Is a leaf heavy or light? | **Light** |
| 3 | Sort your objects. | **Learner sorts** |
| 4 | How do we lift safely? | **Bend the knees, keep the back straight** |

## WATCH OUT FOR

No object too heavy for a child to lift.

## ASSESSMENT RUBRIC - THE FOUR CBC LEVELS

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

## SUPPORT AND EXTENSION

| | |
|---|---|
| **Learners who need support** | Very different objects. |
| **Learners ready for more** | Name a heavy thing at home. (Answer: A bag of maize (answers vary)) |
| **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 "heavy and light objects" 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.

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# Heavier than and lighter than

Strand 2.0 Measurement > Sub-strand 2.2 Mass | Lesson 2 of 10 | 30 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 compare two masses by holding

## KEY INQUIRY QUESTION(S)

- How can you compare the mass of two or more objects?
- How can you show that an object is heavier than, lighter than or the same as your mathematics textbook?

## 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 | **Digital literacy** | Learners use a phone, tablet or the class computer to explore or check the idea. |
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## KEY WORDS

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## THE LESSON AT A GLANCE

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|---|---|---|---|---|
| 4 min | 7 min | 8 min | 7 min | 4 min |

## LESSON FLOW

| Stage | Minutes | The teacher | The learners |
|---|---|---|---|
| **Introduction** | 4 | Greet the class and ask: "Hold a book in one hand and a pencil in the other." 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** | 7 | Take learners through "Comparing by holding" (learning activity on the next page), explaining as you go. Use objects of different masses (stones, books, bottles of water, leaves), a simple beam balance (a stick hung by its middle with a tin at each end), bottle tops, stones or marbles as measuring units. Ask learners to predict what comes next 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** | 7 | 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** | 4 | Ask two or three learners to state the key idea in their own words. Give this exit question and check the answers: "Which hand feels pulled down more?" | Say the key idea in their own words and answer the exit question in the exercise book. |

## LEARNING ACTIVITY

**Comparing by holding**

Hold one object in each hand. The hand pulled down more holds the heavier object. Say: "The book is heavier than the pencil. The pencil is lighter than the book."

Compare pairs of objects.

## PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

| No. | Question | Answer |
|---|---|---|
| 1 | Which is heavier, the book or the pencil? | **The book** |
| 2 | Say a sentence with "lighter than". | **Answers will vary** |
| 3 | Compare a stone and a bottle top. | **Answers will vary** |
| 4 | Which hand feels pulled down more? | **The one with the heavier object** |

## WATCH OUT FOR

Close masses are hard to tell by hand; use a balance next lesson.