Grade 4 Agriculture and Nutrition

Term 1 - 37 complete lesson plans

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

ABOUT THIS PACK

37 complete, ready-to-teach Grade 4 Agriculture and Nutrition lesson plans for Term 1, covering soil conservation, water conservation, fuel conservation, conserving wild animals and direct sowing of tiny seeds.

TOPICS IN THIS PACK

Topic	Name	Lessons
1.1	Soil Conservation	7
1.2	Water Conservation	7
1.3	Fuel Conservation	7
1.4	Conserving Wild Animals	8
2.1	Direct Sowing of Tiny Seeds	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

What is compost and why soil needs it

By the end of the lesson, the learner should be able to: a) explain what compost manure is; b) explain why soil needs organic matter added to it

> **Compost manure**
> Compost is manure made by letting plant and kitchen waste rot (decompose) into a dark, crumbly material full of nutrients that plants need to grow well.

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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What is compost and why soil needs it

Strand 1.0 Conservation of Resources > Sub-strand 1.1 Soil Conservation | Lesson 1 of 7 | 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) explain what compost manure is; b) explain why soil needs organic matter added to it

KEY INQUIRY QUESTION(S)

- How can composting conserve the environment?

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.
VALUE	**Unity**	Learners share materials fairly and work as one team.
PCI	**Environmental education**	Examples link to caring for the school and home environment.

LEARNING RESOURCES

Pictures of compost heaps | Manila paper and marker pens

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

compost | manure | organic waste | decompose | heap method

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

Inside this plan: the step-by-step lesson flow with what the teacher and learners do, the key content, practice questions with answers, a common mistake to watch for, an assessment rubric on the four CBC levels, support and extension ideas, homework and a reflection page.

LESSON FLOW

Stage	Minutes	The teacher	The learners
Introduction	5	Greet the class and ask: "What happens to fallen leaves left on the ground for many weeks?" 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 pictures of compost heaps, manila paper and marker pens. 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: "Have you seen a compost heap before? Where?"	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Compost manure

Compost is manure made by letting plant and kitchen waste rot (decompose) into a dark, crumbly material full of nutrients that plants need to grow well.

Soil that is used for growing crops year after year loses its nutrients over time; adding compost puts nutrients back and also helps the soil hold water better.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	What is compost?	**Manure made by letting plant and kitchen waste rot into a dark, crumbly, nutrient-rich material**
2	Why does farm soil need compost added to it over time?	**Repeated farming uses up soil nutrients, and compost puts them back**
3	Name one other benefit of compost to soil, besides nutrients.	**It helps the soil hold water better**
4	Have you seen a compost heap before? Where?	**Answers vary; check it is a genuine observation.**

WATCH OUT FOR

Learners think compost is simply rubbish. Show it is a deliberately made, useful farming resource.

ASSESSMENT RUBRIC - THE FOUR CBC LEVELS

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

SUPPORT AND EXTENSION

Learners who need support	Bring a small handful of real, finished compost (or a picture of one) to see and describe.
Learners ready for more	Why might a farmer prefer compost to throwing waste away? (Answer: Compost turns waste into something useful for growing food, instead of it being wasted)
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 "what is compost and why soil needs it" 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.

Materials suitable for compost

Strand 1.0 Conservation of Resources > Sub-strand 1.1 Soil Conservation | Lesson 2 of 7 | 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 identify materials from the local environment suitable for making compost manure

KEY INQUIRY QUESTION(S)

- How can composting conserve the environment?

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.
VALUE	**Unity**	Learners share materials fairly and work as one team.
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LESSON FLOW

Stage	Minutes	The teacher	The learners
Introduction	5	Greet the class and ask: "What plant or kitchen waste is thrown away at your home every day?" 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 pictures of compost heaps, manila paper and marker pens. 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: "List three compostable materials found at your own home."	Say the key idea in their own words and answer the exit question in the exercise book.

WORKED EXAMPLE

Suitable compost materials

Good compost materials include: dry plant matter (maize stalks, dry leaves, straw), green plant matter (fresh grass, weeds, vegetable peelings), and animal manure.

A mix of dry and green materials decomposes best - too much of only one type breaks down slowly or smells badly.

PRACTICE QUESTIONS - WITH ANSWERS FOR THE TEACHER

No.	Question	Answer
1	Name two dry materials suitable for compost.	**Any two of: maize stalks, dry leaves, straw**
2	Name two green materials suitable for compost.	**Any two of: fresh grass, weeds, vegetable peelings**
3	Why is a mix of dry and green materials better than only one type?	**A mix decomposes properly; too much of one type breaks down slowly or smells badly.**
4	List three compostable materials found at your own home.	**Answers vary; check they are genuinely compostable.**