Plants and Animals

Lesson plan and teacher's notes · Grade 2 Science · 1 period of 40 minutes

School	(write school name)	**Teacher**	(write name)
Date	(date)	**Class**	Grade 2
Subject	Science	**Enrolment**	Boys ___ Girls ___ Total ___
Time	40 minutes	**Topic**	Plants and Animals

An introduction for learners with visual impairment. Learners touch real plants and plant parts, learn what each part does, and learn what a habitat is through five places where animals live. One period of 40 minutes. The Ministry module text on file covers only the overview and vocabulary, so the detail is taught in the Plants and Animals sub-topic guides.

Specific outcomes

By the end of the lesson, learners should be able to:

1. Name the parts of a plant and say what each does
2. Say what a habitat is
3. Match animals to habitats such as forest, river, lake and grassland

Prior knowledge

- Learners have felt leaves, fruits and seeds
- Learners know some animals by name

Teaching and learning materials

- A real plant with root, stem and leaves, and a flower or fruit if possible
- Seeds and a fruit
- Braille cards for key words
- Chalk and board

References

Ministry of Education (CDC) Grade 2 Science syllabus and module; 25Schools learners' note: Plants and Animals.

Lesson development

Stage and time	Teacher activities	Learner activities
Hook and touch **10 min**	Ask: Have you ever eaten a fruit and wondered where it came from. Or seen an animal and wondered where it lives. Let learners touch a fruit, seeds and a plant.	Touch the objects and answer.
Parts of a plant **15 min**	Guide learners to feel the root, stem, leaf, flower and fruit on a real plant, one part at a time, and say what each does: the root takes in water and food from the soil, the stem holds the plant up and carries water and food, the leaf makes food using sunlight, the flower helps make seeds, the fruit holds seeds, and a seed can grow into a new plant. Explain life cycle as the stages from seed to adult plant and back to seed.	Feel each part, name it and say its job.
Habitats **10 min**	Explain a habitat as the place where an animal lives and finds food, water and shelter. Describe forest, soil, river, lake and grassland with the animals that live in each and ask learners to match animals to habitats using Braille cards.	Match animals to their habitats.
Conclusion **5 min**	Ask: What does the root do. What is a habitat. Tell learners that the next lessons study plants and animals in more detail.	Answer and repeat the key words.

Teacher's content notes

Read these before the lesson. They are what you need to know, not what to copy onto the board.

Plant parts

The root takes in water and food from the soil. The stem holds the plant upright. The leaf makes food using sunlight. The flower helps make seeds. The fruit holds seeds. A seed grows into a new plant.

Life cycle

A life cycle is the stages a plant goes through from seed to adult plant and back to seed again.

Habitats

A habitat is where an animal lives and finds food, water and shelter. Forest: monkeys and birds. Soil: worms and insects. River: fish. Lake: crocodiles and fish. Grassland: zebras and antelopes.

Questions to ask during the lesson

Question	Expected answer
The teacher holds a bean plant and asks a learner to feel the part that goes into the soil. (a) What is it called. (b) What does it take in. (c) What holds the plant upright.	(a) The root. (b) Water and food from the soil. (c) The stem.
A teacher says a fruit holds seeds and a seed grows into a new plant. A learner repeats it. (a) What does the fruit hold. (b) What can a seed grow into. (c) What is the stages from seed to seed called.	(a) Seeds. (b) A new plant. (c) A life cycle.
The teacher describes a place with many trees where monkeys and birds live. (a) What is the place called. (b) What do we call where an animal lives. (c) Where do fish live.	(a) A forest. (b) A habitat. (c) In a river or a lake.

Worked examples for the board

Feeling a plant

Step 1: Feel the root under the soil. Step 2: Feel the stem going up. Step 3: Feel the leaves on the stem. Step 4: Say what each part does.

Matching animals to habitats

Step 1: Read the animal card. Step 2: Think where it finds food, water and shelter. Step 3: Name the habitat. Step 4: Say it aloud.

Board plan

Write the title Plants and Animals. Write the plant parts and their jobs in a table. Write habitats and their animals in another.

Part or habitat	Job or animals
Root	Takes in water and food
Leaf	Makes food using sunlight
Forest	Monkeys and birds
River	Fish

The finished board

Mistakes to expect

Learners often think	Put it right
The leaves take in water from the soil.	Let learners feel the root underground and say the root takes in water and food from the soil.
All animals live in the same place.	Match animals to forest, river, lake, soil and grassland and say each is a habitat.

Differentiation

Learners who struggle

Use only three plant parts, the root, stem and leaf, on one real plant and let learners feel each as you name it.

Learners who finish early

Ask learners to name an animal and say its habitat and what it finds there.

Hearing or visual impairment

For learners with a visual impairment, use real plants, seeds and fruit and let them touch every part. Describe each habitat aloud and use sound cues.

No projector, no printing

Use a small weed with its root and a fruit from home. Describe habitats with sounds and stories if no pictures are available.

If time is short

Keep touching the plant parts and the habitat matching. Move the life cycle to the next lesson.

Evaluation

Question or task	A correct answer shows
The teacher gives Chanda a bean plant and asks about it. (a) What part is under the soil. (b) What does it do. (c) What does the leaf do.	(a) The root. (b) Takes in water and food from the soil. (c) Makes food using sunlight.
The teacher shows pictures of a crocodile and a zebra to a learner and asks where each animal lives in nature. (a) Where do crocodiles live. (b) Where do zebras live. (c) What is a habitat.	(a) A lake. (b) A grassland. (c) The place where an animal lives and finds food, water and shelter.

Homework

At home Bupe finds a plant and a fish pond near her house. Her father asks her about them. (a) Which part of the plant holds it upright. (b) Which part makes food using sunlight. (c) Which animal lives in water such as a river.

Extra practice with answers

Question	Answer
1. A teacher gives Mulenga a plant and asks him to find the flat part that makes food. (a) What is it called. (b) What does it use to make food. (c) What part holds the seeds.	(a) The leaf. (b) Sunlight. (c) The fruit.
2. During a lesson outside, Njavwa digs a little soil and finds worms and small insects. Her teacher asks her to say where these animals live. (a) What is their habitat. (b) What is a habitat. (c) Which habitat has flowing water.	(a) Soil. (b) The place where an animal lives and finds food, water and shelter. (c) A river.

3. The teacher names zebras and antelopes and asks the group for their home. (a) What is the habitat. (b) What does it look like. (c) Which habitat has still water.	(a) A grassland. (b) Open land with grass. (c) A lake.
4. A learner holds a seed and asks what will happen if it is planted. (a) What can a seed grow into. (b) What is the whole set of stages called. (c) Which part of the plant makes seeds.	(a) A new plant. (b) A life cycle. (c) The flower.

Answers to the learners' check-yourself questions

1. What does the root do.
   It takes in water and food from the soil.
2. Which part of a plant makes food using sunlight.
   The leaf.
3. What is a habitat.
   The place where an animal lives and finds food, water and shelter.
4. Which animals live in a forest.
   Monkeys and birds.
5. Chipo holds a bean plant and her teacher asks her to feel its parts. She touches the part under the soil and the part that holds the plant up. (a) What is the part under the soil called. (b) What is the part that holds the plant up called. (c) What does the part under the soil take in.
   (a) The root. (b) The stem. (c) Water and food from the soil.
6. A teacher tells the class about a place with open land and grass where zebras live, and another with flowing water where fish live. A learner is asked to name them. (a) What is the grass place called. (b) What is the flowing water place called. (c) What do we call a place where an animal lives.
   (a) A grassland. (b) A river. (c) A habitat.

Teacher's reflection

What went well:

What I will change next time:

Learners who need follow-up: