Animals and Their Habitats

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

School	(write school name)	**Teacher**	(write name)
Date	(date)	**Class**	Grade 2
Subject	Science	**Enrolment**	Boys ___ Girls ___ Total ___
Time	80 minutes	**Topic**	Animals and Their Habitats

Learners with visual impairment sort animal models into habitats using tactile trays, then discuss what harms habitats and how to protect forests, water and grasslands. Two periods of 40 minutes.

Specific outcomes

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

1. Categorise animals into habitats: forests, soil, rivers, lakes and grasslands
2. Say what destroys animal homes
3. Suggest ways to protect animal habitats

Prior knowledge

- Learners know common animals
- Learners know trees, soil and water by touch

Teaching and learning materials

- Leaves and twigs from a forest
- Soil, water in a container and dry grass
- Toy animals or moulded shapes
- Sorting trays labelled forest, soil, river or lake and grassland
- Audio of animal sounds
- Clean and dirty water

References

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

Lesson development

Stage and time	Teacher activities	Learner activities
Period 1 Present 10 min	Let learners touch leaves and twigs, soil, water and dry grass while you explain: this is a forest where animals live among trees, this is soil where some animals live under the ground. Play animal sounds and ask where each animal lives.	Touch the materials and guess where animals live.
Period 1 Practice and produce 20 min	In groups, learners place toy animals in the correct habitat tray and say why, for example fish live in water. Each learner then sorts mixed objects alone and answers: if you see a fish, where would you find it.	Sort models and explain choices.
Period 1 Closure 10 min	Ask which animals live in forests, water, soil and grasslands and why animals live in different places.	Recall and match animals to habitats.
Period 2 Present 10 min	Explain that animals need safe homes just like people. Describe how cutting trees, burning grass and polluting water destroy homes. Introduce planting trees and keeping water clean. Ask: if people throw rubbish in the river, what happens, and if trees are cut down, where will animals live.	Listen and answer oral scenarios.
Period 2 Practice 20 min	Show clean and dirty water, and dry soil and soil with plants. Learners touch and explain the differences. Then group work: group 1 ways to protect forests, group 2 water bodies, group 3 grasslands. Groups present orally.	Compare setups and present ideas.
Period 2 Closure 10 min	Each learner says one way they will protect animal habitats at home or school. Summarise that we protect habitats by keeping the environment clean and safe.	Name one protection action.

Teacher's content notes

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

Habitats

Animals live in forests, soil, rivers, lakes and grasslands. A habitat is where an animal lives.

Harm

Cutting down trees, burning grass and polluting water can destroy animal homes.

Protection

Plant trees, keep water clean and do not burn grass. Keep the environment clean and safe.

Questions to ask during the lesson

Question	Expected answer
The teacher plays the sound of a frog and asks Chanda where she thinks it lives, after she touches a container of water. (a) Where does a frog live. (b) What is this place called. (c) Name another animal there.	(a) In water, such as a river or lake. (b) A habitat. (c) A fish.
The teacher tells the class that people near a village are cutting down many trees in the forest to make charcoal. (a) What happens to the animals. (b) Where will they live. (c) What can the villagers do.	(a) They lose their homes. (b) They will have nowhere safe. (c) Plant trees.
The teacher asks the class what to do about a river near the school that has rubbish floating in it from the market. (a) What is the problem. (b) Who is harmed. (c) How can learners help.	(a) Pollution. (b) Animals in the water. (c) Keep water clean and put rubbish in bins.

Worked examples for the board

Sorting an animal

Step 1: Pick up the toy fish. Step 2: Ask where it lives. Step 3: Feel the trays. Step 4: Put it in the river or lake tray and say: fish live in water.

Protecting a habitat

Step 1: Name the harm, for example burning grass. Step 2: Say who loses a home. Step 3: Say what to do instead, such as not burning grass or planting trees.

Board plan

Write the title Animal Habitats. List the four habitats and an animal for each. Add a second list: ways to protect them.

Habitat	Animals
Forest	Birds
Soil	Insects
River or lake	Fish
Grassland	Insects

The finished board

Mistakes to expect

Learners often think	Put it right

All animals live in the same place.	Let learners sort animal models into trays and say why each animal lives where it does.
Burning grass does not hurt animals.	Explain that burning grass can destroy animal homes and ask learners to say what animals would lose.

Differentiation

Learners who struggle

Use two trays only, such as water and trees, then add more habitats as learners succeed.

Learners who finish early

Ask learners to describe a habitat in their own words and say how they would protect it.

Hearing or visual impairment

Describe each material aloud, let learners touch and smell every habitat sample, use audio sounds and pair each learner with a helper in group work.

No projector, no printing

Use soil, twigs, dry grass and water in tins as habitat trays, and shapes moulded from clay as animals.

If time is short

Keep the habitat sorting in Period 1 and ways to protect habitats in Period 2. Do the group presentations next lesson.

Evaluation

Question or task	A correct answer shows
The teacher gives Bupe a toy fish, a toy bird and a toy insect and the trays, and asks her to place them. (a) Where does the fish go. (b) Where does the bird go. (c) Why.	(a) River or lake tray. (b) Forest tray. (c) Each animal lives where it finds what it needs.
The teacher touches clean and dirty water with Mwamba and asks him what he feels and what it means for fish. (a) Which water is safe. (b) What makes water dirty. (c) What can people do.	(a) Clean water. (b) Rubbish and pollution. (c) Keep water clean.

Homework

Njavwa lives near a river. She sees children throwing rubbish into it and grass being burned nearby. She tells her family what she learned. (a) Which animals are harmed by dirty water. (b) What happens when grass is burned. (c) Name one way she can help.

Extra practice with answers

Question	Answer

1. Mulenga is handed a toy bird, a toy fish and a toy insect during practice and told to place each in the correct tray. (a) Which tray for the bird. (b) Which tray for the fish. (c) Which tray might the insect go in.	(a) Forest. (b) River or lake. (c) Soil or grassland.
2. The teacher asks the class what happens if people keep cutting down trees in a forest near the school and no one plants new ones. (a) What do animals lose. (b) Where do birds live. (c) What can we plant.	(a) Their homes. (b) In trees. (c) Trees.
3. Bupe finds a tin with dirty water and a tin with clean water and feels both during practice. (a) Which is safe for fish. (b) What made the other dirty. (c) What should people do.	(a) Clean water. (b) Pollution or rubbish. (c) Keep water clean.
4. Mwamba's grandmother burns the dry grass behind the house every year before planting, and Mwamba knows grassland animals live there. (a) What is harmed. (b) What should he tell her. (c) What can they do instead.	(a) Animal homes. (b) Burning grass can destroy homes. (c) Plant trees or avoid burning.

Answers to the learners' check-yourself questions

1. What is a habitat.
   The place where an animal lives.
2. Where do fish live.
   In water, such as rivers and lakes.
3. Name one thing that harms animal homes.
   Cutting down trees, burning grass or polluting water.
4. Name one way to protect animal homes.
   Plant trees, keep water clean or do not burn grass.
5. Mulenga sees people throw rubbish into the river near his village and the water becomes dirty. His friend asks what will happen. (a) What is this action called. (b) Which animals are harmed. (c) What should people do instead.
   (a) Polluting the water. (b) Animals that live in the water, such as fish. (c) Keep the water clean.
6. Chanda finds a bird in a tree and a fish in a river on a school trip, and her teacher asks where each one lives. (a) Where does the bird live. (b) Where does the fish live. (c) What is such a home called.
   (a) In a tree in the forest. (b) In the river. (c) A habitat.

Teacher's reflection

What went well:

What I will change next time:

Learners who need follow-up: