

# SCIENCE









## Lesson 7

Prep

**Topic: Meeting needs in different environments**

### Environments that people care for

#### Lesson concepts

-  Living things have basic needs
-  Science involves exploring and observing the world using the senses
-  Questions can obtain responses
-  Observations can be made using the senses
-  Observations can be discussed and ideas can be represented
-  Observations and ideas can be shared

#### Learning alerts

##### Be aware of:

- students not realising how humans provide for the living things in some environments.

##### Suggested next steps for learning

- Explain what actions need to be taken to provide for needs (for example: water and feed troughs need to be filled regularly).

Today students will:

- ▶ understand that people provide the basic needs for living things in some environments.

## Resources

### Digital

Slideshow — Photos from the farm: Sent by Gumnut

### Find and prepare

Sheet — Email from Gumnut: Farms

Sheet — Places where people care for animals and plants

Sheet — Representing a farm

Scrapbook

Selection of materials to create a model of a farm (for example: plastic/wooden animals, blocks, collage materials, small containers and packages, iceblock sticks, match sticks, paper, card)

Adhesive tape

Adhesive tack

Scissors

Camera

Recording device (for example: video camera, digital voice recorder) (optional)

## Key terms

environment

For definitions and explanations of terms, please see the [Glossary](#).

## Lesson

### Review basic needs of living things

#### Say to students

‘ We have been learning about the basic needs of living things and how these are provided. I am going to draw some living things. I want you to think about what each would need to survive while I draw them. ’

Draw a simple outline of a plant, a person and a familiar pet, for example: in the student's exercise book or on paper.

### Focus questions

Q: *What are the basic needs of these living things?*

A: Food, water, air, shelter.

Q: *Do each of the things drawn (plant, person and animal) need all of these or can they survive without one of them?*

A: They need them all.

### Say to students

‘ Even though different living things have their needs met in different ways, all living things have the same basic needs. ’

## Investigate farms as environments for living things

### Say to students

‘ Gumnut has sent an email for us to read. ’

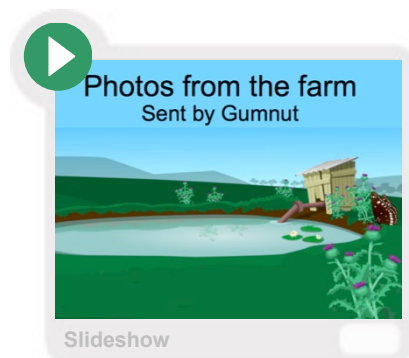


Read the email **Sheet** — [Email from Gumnut: Farms](#).

### Say to students

‘ Now we will look at Gumnut’s farm photos. Remember, science involves us observing and asking questions to learn more about the world, so we are going to view the photos like scientists. We are going to observe closely and ask questions about what we observe. ’

Click on the picture to view and discuss the **Slideshow — Photos from the farm: Sent by Gumnut**.



## Focus questions

Q: *Who meets the needs of living things on a farm?*

A: The farmer.

Q: *What do farmers do to meet the needs of animals or plants?*

A: For example: the farmer gives them food and water, builds shelters for them, plants trees for shade, waters the plants.

Q: *What questions might a farmer ask themselves when looking after the animals and plants?*

A: For example:

- Do any animals look injured or sick? Are any ready to have their babies?
- Do the plants look healthy? Ready for harvesting? Should I plant the seeds?
- What is the weather going to be like? How much water is in the dam?
- Does anything need fixing on the farm, for example: fences, machines, roofs?

Q: *What would happen if all the basic needs weren't met?*

A: For example: the animals would get sick and possibly die, and plants might not grow properly.

Q: *Can the animals and plants escape the farm conditions they are in? Why/why not?*

A: For example: No, animals are usually fenced in and plants can't move.

## Say to students

6 We can see that farms are one 'environment' where the living things rely on people. It is very important that farmers observe the plants and animals to ensure their needs are being met. They also need to work with scientists like vets, biologists (scientists who study living things), botanists (plant scientists), hydrologists (water scientists), geologists (rock and soil scientists) and meteorologists (weather scientists) to properly look after the living things in their care.

## Represent a farm

### Say to students

6 You are now going to use your science knowledge to make a model or a drawing of a farm. It can be a farm that has animals, plants or both, but you must show how the needs of the living things are being met. These are the materials for you to use.

Allow time to construct the model or drawing.

Take a photo of the student's model or drawing. (Optional)

### Say to students

‘ I am now going to ask you some questions about your farm model or drawing. ’



Record (or scribe) answers on **Sheet** — [Representing a farm](#).

### Focus questions

**Q:** *Tell me about your model or drawing?*

**A:** Answers will vary from labelling parts of the farm to explaining how the living things' needs are being met.

**Q:** *How does your farm provide for the needs of the living things?*

**A:** For example: The farmer puts water in the trough and feeds the animals; the animals have stables and pens to keep them safe and for when they need to get out of the weather. The farmer plants the seeds, waters them and keeps the weeds away. The sun shines on the animals and plants to keep them warm.

**Q:** *What could change on your farm?*

**A:** For example: There could be a drought or a flood and the farmer could run out of food for the animals. The flood could cover all the paddocks.

**Q:** *How might this affect the living things?*

**A:** For example: The farmer might have to move the animals to somewhere else to meet their needs. They may have to buy more food and water.

**Q:** *What would a scientist do to find out if the needs of the living things on the farm were being met?*

**A:** For example: A scientist would observe the animals and plants using all their senses and ask questions about their observations.

**Q:** *How would a scientist know if the needs of the living things were being met?*

**A:** For example: The living things would look healthy and strong with no injuries or diseases. They would make the sounds that healthy animals make.

### Relate knowledge to other environments

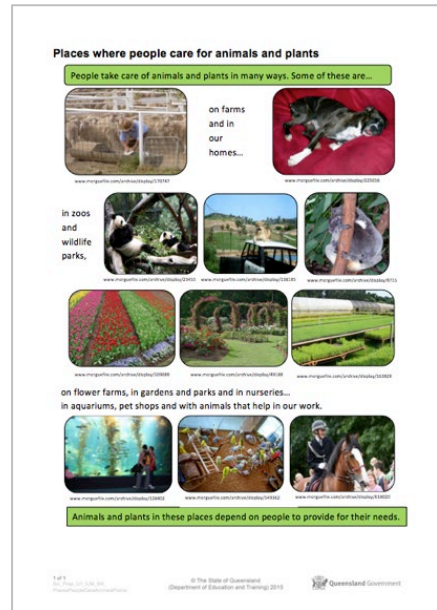
### Say to students

‘ Farms are one place where people take care of the living things. There are many others. ’



Display and view the **Sheet** — [Places where people care for animals and plants.](#)

Discuss who might provide for the needs of the living things in some of the situations (for example: farmers, rangers, wildlife carers).



### Say to students

‘ Science tells us that all the needs of living things must be met to ensure survival. It is important for the people who are providing for the needs of living things that they take full responsibility for doing so. ’