

# SCIENCE







## Lesson 5

Prep

### Topic: The needs of living things

#### Considering the needs of animals

##### 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 confusing basic needs with secondary needs.

###### Suggested next steps for learning

- Ask the student to discriminate between the two such as: *Do they need it to stay alive or want it to be happy and comfortable?*

Today students will:

- ▶ understand that all living things have the same basic needs that must be met by their environment for them to survive.

## Resources

### Find and prepare

Sheet — Letter from Gumnut: Needs

Sheet — Needs of living things (cut out cards and store in an envelope)

Sheet — Science word list  
envelope

8–10 model animals (including some farm, zoo or home animals and some that could be from the wild) or you could find pictures of a variety of animals

materials for representing an animal's needs, for example: modelling clay, matchsticks, pop sticks, paper, cardboard, cotton wool, blocks (for example: wooden, plastic connectable), pipe cleaners, small boxes

camera (Optional)

## Key terms

wild, needs

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

## Lesson

### Recall learning about living things

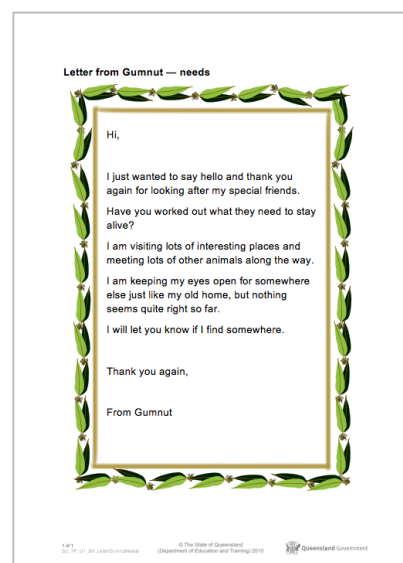
#### Say to students

- 6 In previous science lessons, we looked at the 'needs' of our pets and how we provide for them. In this lesson, we will learn about animals that live in other types of environments.

To begin this science lesson there is another letter for us to read.



Read the letter **Sheet** — [Letter from Gumnut: Needs](#).



### Focus questions

Q: *Can you remember the basic needs that living things have to stay alive?*

A: Food, water, shelter, air and warmth.

Q: *How do scientists find out about the needs of living things?*

A: By observing and asking questions.

## Consider the needs of animals

### Say to students

“ Even though scientists have been observing living things for a very long time there is still a lot more to learn. Scientists need to keep asking questions so that we can protect our planet and all its living things. ”

### Say to students

“ When animals live free in the bush, the desert, the rainforest or the sea they have to provide for their own needs. We call these animals ‘wild animals’, which means they are not cared for by people. ”

Display a few models of farm animals.

### Focus questions

Q: *Where do you think these animals are likely to live?*

A: On a farm.

Q: *Do you think we would describe farm animals as wild animals? Why do you think this?*

A: For example: No, because people care for them and there are fences to keep them in and safe.

Q: *Who provides for the needs of farm animals so they will survive?*

A: The farmer.

## Compare basic needs

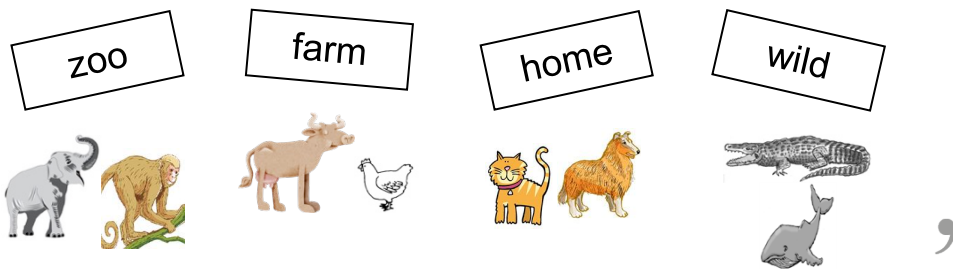


Display and read the words 'home', 'farm', 'zoo' and 'wild' from the **Sheet** — [Science word list](#).

Provide a selection of model animals to each student or you could find pictures of a variety of animals.

### Say to students

- 6 These four words are places where animals can live. These models or pictures are examples of some of the animals that live in these places. Choose one animal at a time and place them beside the word card where you think they live. Some animals could be found in more than one place, so sort them where you think they would most likely be found in Australia.



Provide the students with a strip of 'needs' pictures (cut into individual pieces) from the **Sheet** — [Needs of living things](#).

### Say to students

- 6 These pictures show the essential needs of all living things. They are water, food, air, shelter and warmth from the sun.

Choose one group of animals that you have just sorted.

Now look at the 'needs' pictures. If you think the animals in that group need what is shown on that picture, place it with the animals.

Continue until you have looked at each picture and the animals in the group.

Support students to place the pictures of the needs that they think apply to the animal group.

### Focus questions

Q: *Are there any pictures left?*

A: No.

Q: *Why not?*

A: For example: Farm animals need all those things.

### Say to students

Now choose another animal group and think about what they need. Place a picture of each need they have beside them.

Provide the students with another strip of needs pictures cut into individual pieces.

### Focus questions

Q: *What needs did you identify that this group of animals have?*

A: For example: They need food, water and air.

Q: *What needs do you think the rest of the groups of animals would require?*

A: For example: They will need food, water and air as well.

Q: *Why do you think this is so?*

A: Because they are living things and they need all those things to survive.

Repeat the activity with the remaining groups. Encourage students to justify their decisions.

### Say to students

We can see that all animals, no matter where they live, need the same things to survive because they are living things. Those needs are food, water, air and shelter.

## Consider the effects of needs not met

### Say to students

Now I want you to take one picture away from one of the groups. Think about whether the animal could survive with that need not being met.

### Focus questions

Q: *Do you think the animal can survive without just one of its needs not being met?*

A: No.

Q: *Why not?*

A: Because it needs all those things to survive.

### Say to students

‘ Sometimes things happen that make it very hard for animals to meet all of their needs. Animals in the wild are often faced with things that can make it difficult to survive. These things can include the loss of the trees due to a bushfire, or a drought that causes there to be no water for the animals. Floods can cause plants that provide food and shelter to be washed away. When these things happen, animals can find it very difficult to survive. ’

### Focus question

**Q:** *What are some other events that would make it very hard for animals to meet their needs?*

**A:** Support students to think about extreme weather events such as cyclones or the destruction of habitat due to development.

### Represent the needs of a living thing

Display the materials available for students to make a representation of an animal's needs being met. The representation can be in any form, for example, drawing, painting or 3D model.

### Say to students

‘ To finish this science lesson you are going to choose an animal that you know about.

You are going to make a representation showing the animal with its needs being met using the materials available. ’

Allow time for them to construct their representation.

### Focus questions

**Q:** *Tell me about what you have constructed?*

**A:** For example: This is the stable, this is the water trough, this is the grass and the fence (the student may label the parts).

**Q:** *How does this environment provide for the needs of the animal?*

**A:** For example: The stable gives the horse shelter; the grass is the food; the water trough has to be filled up each day.

**Q:** *What would happen if there was a change (drought, fire, flood) in the environment?*

**A:** For example: There could be a drought and all the grass would die. There might not be enough water.

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

**A:** For example: It would be very hungry and thirsty. The person who looks after the horse would need to buy more food or take the horse to a new paddock where there is food.

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

**A:** A scientist would observe and ask questions.

**Q:** *How would they know if the needs were being met?*

**A:** For example: They would know by looking at the animal and seeing that it looks sick or tired. It might look skinny from not having anything to eat.

Support students to identify needs they did not represent.

Take a photo of the representations (optional).