Living things & their habitats

How do we know something is alive?

Lesson 3: How are animals suited to different habitats around the world?





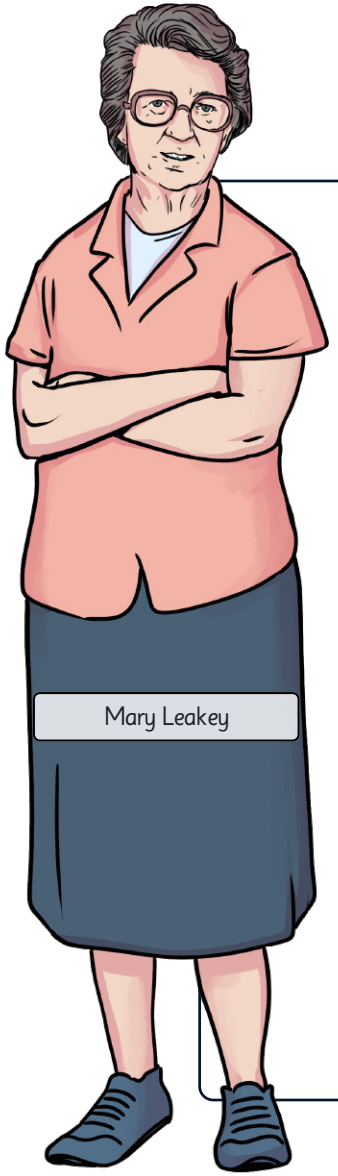






Grammarsaurus

Scientific enquiry types and skills



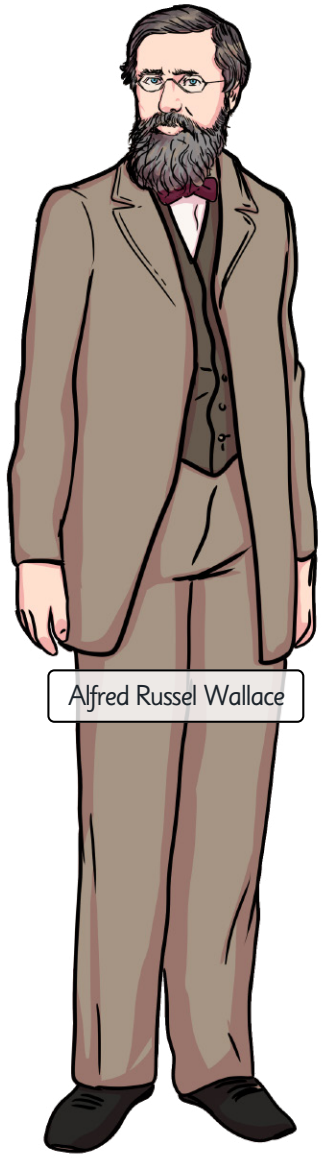
Scientific enquiry types

- Testing
- Researching
- Observing
- Pattern seeking
- Identifying & classifying ✓
- Problem solving

Working scientifically skills

- Asking questions
- Making predictions
- Setting up tests
- Observing & measuring
- Recording data
- Interpreting & communicating results ✓
- Evaluating

How do we know something is alive?



Alfred Russel Wallace

Lesson 1: What clues tell us something is alive?

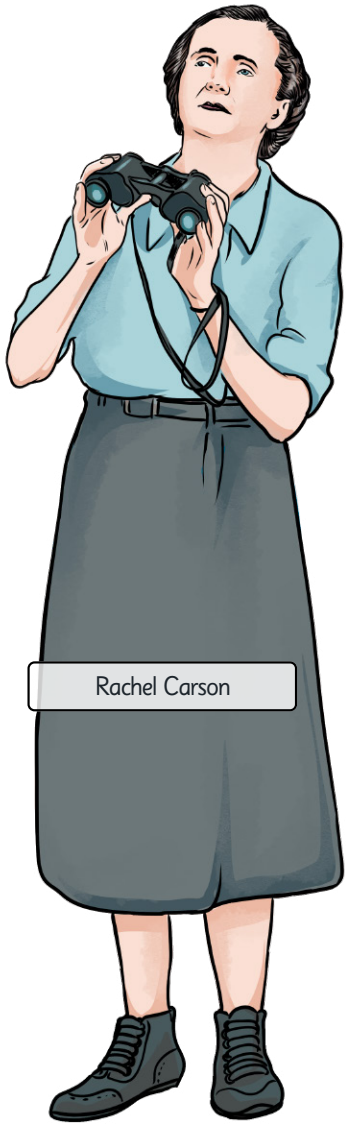
Lesson 2: How are plant habitats different around the world?

Lesson 3: How are animals suited to different habitats around the world?

Lesson 4: What makes a tiny place the perfect home?

Lesson 5: What is a food chain?

Lesson 6: How can we protect habitats?

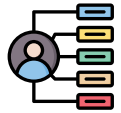


Rachel Carson

Key vocabulary for this lesson



environment – the world around us



feature – a distinctive part of something

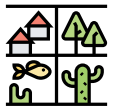


suitable – having the right features that work well in a place or situation

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conditions – things around something that change how it behaves



habitat – a place where plants and animals live



survive – to stay alive, even through difficult times

Identifying and classifying



Hello! I'm **Emma**, a **large-animal vet**. I work with **animals** from all around the world. When I meet an animal, I **identify** the clues that show how it is **suited** to its **habitat**. I look at its body, its appearance and the food it eats to see how it gets everything it needs from its environment to help it survive.



Let's recap

Interpreting & communicating results

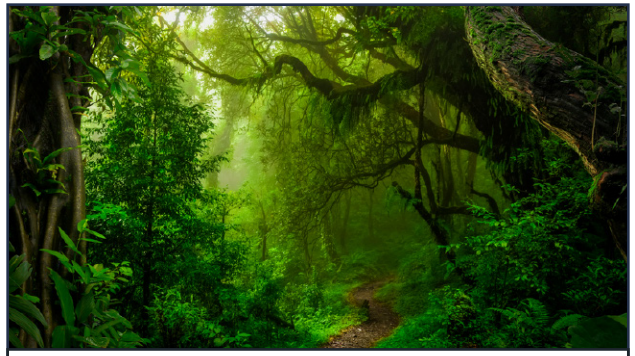
Last lesson we learnt about different **habitats** and how **conditions** such as **temperature**, **rainfall**, **soil** and **sunlight** made each one different.

Think about one habitat you **researched** last lesson.

How are plants suited to the habitat they grow in?



desert



rainforest



woodland

Discuss the question with your learning partner.

Be ready to **share your feedback** with the class.

Let's recap

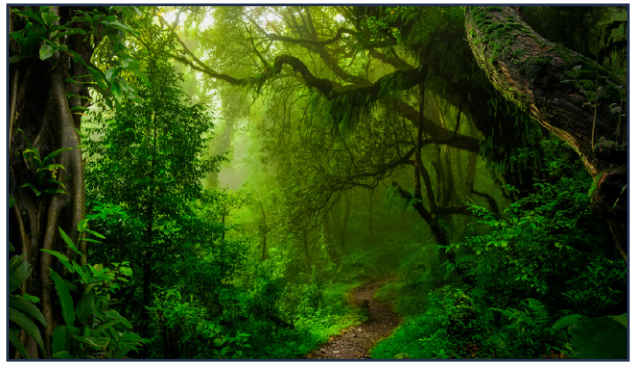
answers

How are plants suited to the habitat they grow in?





The **cactus** is suited to growing in the **desert** because it has **thick skin** and **doesn't need much water**.





This plant grows well in the **rainforest** because it has **big**, **flat leaves** and it likes **hot**, **damp**, **shady conditions**.





These **flowers** are suited to the woodland because they **grow early in spring** before the trees get any leaves. They like **cool**, **damp conditions**.

Basic needs

We know plants are suited to the habitat they grow in because they get all the **things they need**. These are their **basic needs**.







The cactus gets the right amount of **water**, **sunlight** and the right **temperature** which help it to **survive** . It gets **nutrients** from the soil and has space to grow.

Let's discuss



What do animals need and how are they suited to the habitat they live in?

Discuss this question with your learning partner.

Be ready to **share your feedback** with the class before the **answers** are revealed.



Let's discuss

answers

Animals are suited to their habitats because they can get **all the things they need to survive**. They need ***food***, **water**, **air**, **shelter** and **space**.

food

water

air



shelter

space

An animal may also have ***features*** that help it **live well** in that place.

Arctic/polar habitat

The **Arctic** gives the **polar bear** all the things it needs to survive. It can find **food**, get **water** from snow and ice, **breathe** air and make a **shelter** in the snow.

Thick, white fur keeps the polar bear **warm** in the freezing cold and **hidden** when it is hunting.

Can you think of any other animals which are suited to this habitat?



Desert habitat

A **camel** can find all the things in the **desert** that it needs to survive. Camels can **store water**, so that they don't need to drink as often. They also have **long eyelashes** to keep out the sand and **nostrils that can close** to stop sand blowing in.

The camel has **wide**, **padded toes** which help it walk on soft sand.

What other animals can you think of that live in the desert?



Ocean habitat

The **ocean** gives the **clownfish** all the things it needs to survive. It can find **food** and **shelter**. It has **fins** to help it swim and **gills** to get oxygen from the water.

A clownfish can live safely in a sea anemone because its **skin protects it from stings**.



Let's discuss

Interpreting & communicating results



Would this animal live well here?

Think about its basic needs: ***food***, ***water***, ***air***, ***shelter*** and ***space***.





Discuss the question with your learning partner. Be ready to **share your *feedback*** with the class before the **answers** are revealed.

Let's discuss

answers

No, this is not the polar bear's home. The desert **cannot** give the polar bear the things it needs to **survive**.





- It cannot find the right **food**.
- There is not enough **water**.
- The **shelter** is wrong.
- It would not be **hidden** when hunting.
- The hot temperatures would make it **too warm**.

The polar bear's thick fur and large paws are suited to the cold Arctic, not the hot desert.

Which animal fits this habitat?

Interpreting & communicating results

Look at the habitat and think about each animal's needs. **Which animal is suited to this habitat? Can you explain why some of the animals are not suited to this habitat?**







Discuss the question with your learning partner. Be ready to **share your feedback** with the class before the **answers** are revealed.

Use these sentence starters to help you:

"The _____ is best suited to this habitat because..."

"The _____ is not suited because..."

Which animal fits this habitat?

answers





The **lion** and the **zebra** would fit this habitat. They can find the **food** they need here. The lion can **hide in the grass** when it hunts. The zebra can **run fast**, and its **stripes help it to hide** in the tall grass.

The ***frog would not survive*** in this habitat because there is **not enough water**, and it would not find the ***food or shelter*** it needs. The **penguin would not survive** in this habitat because it **hunts for its food in water** and needs **plenty of water to swim in**.





Activity

Identifying & classifying

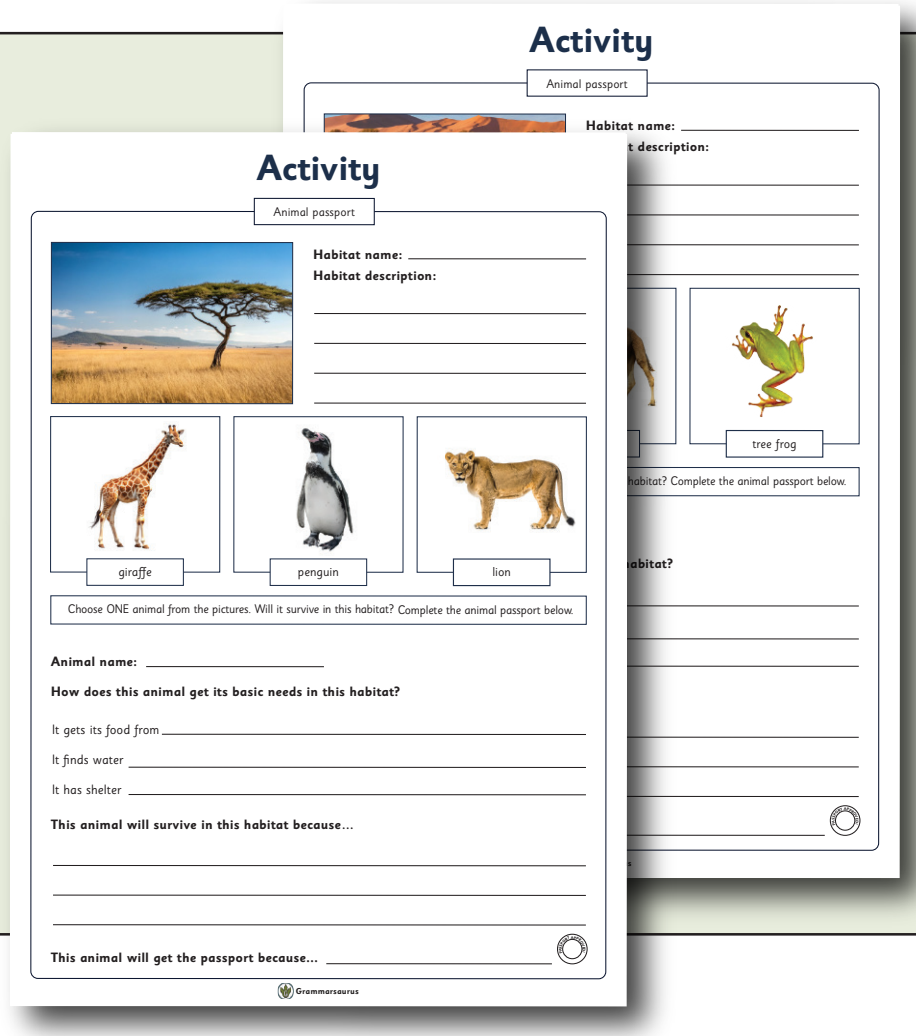
Interpreting & communicating results



Choose **one animal** from the pictures on your **activity worksheet**. Decide if your animal could survive in the habitat shown.

Think about how your animal gets its **food**, **water** and **shelter**. Use the clues on the animal and in the habitat to help you decide.

Complete the '**animal passport**' to show whether your animal will survive in this environment.



Activity

Animal passport

Habitat name:

Habitat description:

giraffe

penguin

lion

tree frog

Choose ONE animal from the pictures. Will it survive in this habitat? Complete the animal passport below.

Animal name:

How does this animal get its basic needs in this habitat?

It gets its food from

It finds water

It has shelter

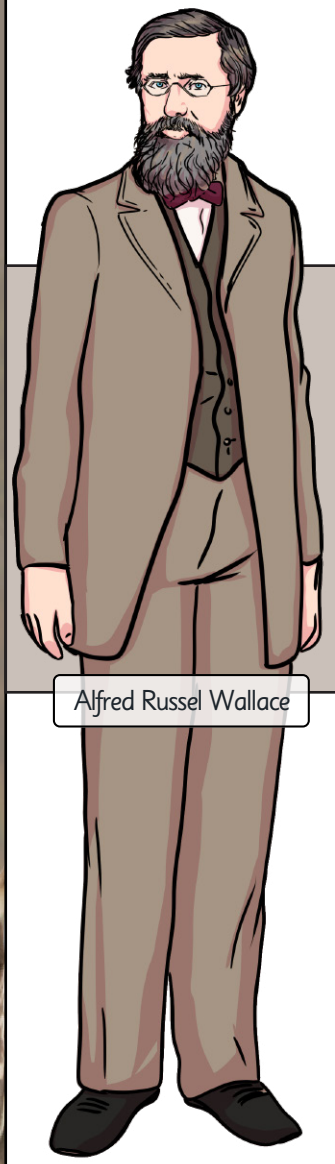
This animal will survive in this habitat because...

This animal will get the passport because...

Grammarsaurus

Challenge

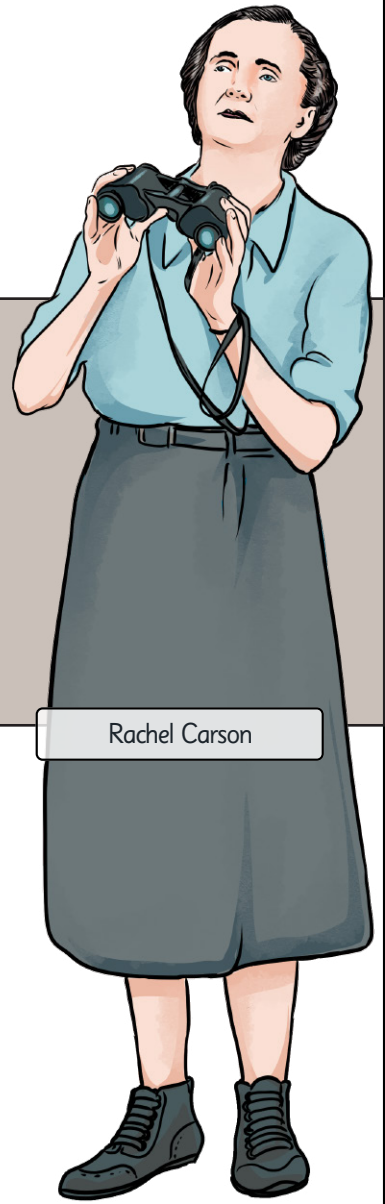
Discuss the following questions with your learning partner.



Alfred Russel Wallace

Zoos make special homes for animals. Choose an animal that you've learnt about. Think about its basic needs.

Would a zoo be able to give your animal everything that it needs to survive?



Rachel Carson

Be ready to **share your feedback** with the class before the **answers** are revealed.

Use these sentence starters to help you:

"I think a _____ could/could not live in a zoo because…"

"The zoo could make sure it has _____ but…"

Challenge

answers



There are many possible answers, here is one example:

I think a penguin could live in a zoo because the zookeepers would feed it fish every day. The zoo can make sure it has a safe place to swim, but it wouldn't be as big as the sea.

