

Living things and their habitats

Introduction to animal habitats

Year 4
Age 8-9



For parents

Thank you for supporting your child's learning in science.

Before the session:

- Please read slide 2 so you know what your child is learning and what you need to get ready.
- As an alternative to lined paper, slide 5 may be printed for your child to record on.

During the session:

- Share the learning intentions on slide 2.
- Support your child with the main activities on slides 3 to 6, as needed.
- Slide 7 is a further, optional activity.
- Slide 8 has a glossary of key terms.

Reviewing with your child:

- Slide 9 gives an idea of what your child may produce.



Living things and their habitats

An introduction to animal habitats

Key Learning

- Animals live in a **habitat** which provides an **environment** to which they are suited.
- A **habitat** provides animals with water, food and shelter.
- Each habitat has different **conditions** such as the amount of light, the temperature and the amount of moisture.
- Animals are **adapted** to live in their habitats.

I can...

- Describe how some animals are adapted to live in an Arctic habitat or a hot desert habitat.

Activities (pages 3-6): 30 - 40 mins

- Use lined paper, a ruler and a pencil.
- Alternatively, print page 6 as a worksheet.



Find out more... (page 7): 30 - 60 mins

- You may like to explore more about animals in an Arctic habitat or a hot desert habitat.





Explore, review, think, talk....

*What do you already know about animals and their habitats?
(5 minutes)*

A **habitat** is a place where an animal lives, providing it with water, food and shelter.

Many animals have **special features or skills** to help them survive in their habitat. They are **adapted** to live there.

Watch this BBC clip: <https://www.bbc.co.uk/teach/class-clips-video/science-ks1-ks2-wonders-of-nature-polar-bears-in-their-habitat/z73ygw>



- Where is a polar bear's den?
- In which habitat do polar bears live?
- How are they adapted to live in their habitat?

- Polar bears live in an **Arctic habitat**.
- Female polar bears dig out a den beneath the snow, where they give birth to cubs.
- They have thick white fur to keep warm.
- They have webbed front paws and are strong swimmers.





Watch, read, listen...

*Animals are adapted to their different habitats
(10 minutes)*

- Watch this clip about different types of owls.
- Try to jot down the habitats they live in and think about how each owl is adapted to their habitats.
- <https://www.bbc.co.uk/bitesize/clips/zv7w2hv>



You may have noticed:

- **Snowy owls** live *in the Arctic* and have mostly white feathers as **camouflage**, so their colour blends in with the snow.
- **Great grey owls** live *in pine forests* and have very thick feathers to keep warm.
- **Elf owls** live *in the hot desert* and find holes in cactus plants. They hunt insects at night when it is cooler.
- **Flammulated owls** live *in mountain forests* and have feathers which match the pattern of bark on trees for camouflage.



Animals are adapted to their habitats

*Describe the adaptations of animals in an Arctic and a hot desert habitat
(page 5-6: 30 minutes)*

- Many animals have **special features or skills** so that they are suited to their habitat. These are called **adaptations**.
- For example, the **Arctic fox** and the **desert fox** are different from the foxes we see in the UK.

Watch *the first 2 ½ minutes* of this BBC clip:

<https://www.bbc.co.uk/teach/class-clips-video/science-ks2-ks3-how-animals-have-adapted/z4y76v4>

- What special features, or adaptations, does the **Arctic fox** have?
- What adaptations does the **desert fox** have?



Create a fact file about the Arctic fox, the snowy owl, the desert fox and the elf owl. Use what you have learnt, the word bank and the pictures to help you.

- large round body and long thick feathers
- small body with grey-brown feathers
- thick warm fur
- white fur in winter
- sandy coloured fur
- mostly white feathers
- small ears
- large ears
- nests on the ground
- nests in holes in cactus plants
- hunts at night

I can describe how some animals are adapted to live in an Arctic habitat or a hot desert habitat.

an Arctic habitat

Arctic fox



a hot desert habitat

desert fox



snowy owl



elf owl





Find out more about Arctic or hot desert habitats

*Extend your fact file with more animals who live in an Arctic or a hot desert habitat
(30 – 60 minutes)*

Choose either an **Arctic** or a **hot desert** habitat. Find out more about the adaptations of other animals living there.



Suggested websites:

Arctic habitat

<https://www.dkfindout.com/uk/animals-and-nature/habitats-and-ecosystems/arctic/>

<https://www.wwf.org.uk/learn/fascinating-facts/polar-bears>

<https://www.wwf.org.uk/learn/fascinating-facts/walrus>

hot desert habitat

<https://www.dkfindout.com/uk/animals-and-nature/habitats-and-ecosystems/american-desert/>

<https://www.bbc.co.uk/programmes/p006b3m3>

Glossary of terms

Environment: The **environment** includes all living and non-living things. Animals and plants rely on the living and non-living parts of the environment to survive.

Habitat: Animals live in a **habitat** which provides an **environment** to which they are suited. A **habitat** provides animals with water, food and shelter.

Condition: Each habitat has different **conditions** such as the amount of light, the temperature and the amount of moisture.

Adaptation: Many animals have **special features or skills** so that they are suited to their habitat. These are called **adaptations**.

Adapted: Animals are **adapted** to live in their habitats. For example, an Arctic fox has thick white fur in winter for warmth and **camouflage**.

Camouflage: Some animals have **camouflage** feathers, fur or skin so they are hard to see in their environment.

The **Arctic fox** has thick fur. Its coat changes from white in winter to brown-grey in summer so it is camouflaged in both seasons. It has small ears so it does not lose warmth.

The round body shape and thick long feathers help the **snowy owl** to stay warm. The feathers also extend over its feet and beak. It nests on the ground and the chicks huddle together for warmth.

Possible learning outcome for reviewing your work.

I can describe how some animals are adapted to live in an Arctic or a hot desert habitat

an Arctic habitat

The Arctic fox has thick fur for warmth.



The fur is white in the winter for camouflage against the snow. It has small ears.

The snowy owl has a large round body and long thick feathers for warmth.



It has mostly white feathers for camouflage. It nests on the ground.

a hot desert habitat

The desert fox has sandy coloured fur and large ears to help it stay cool.



It hunts for insects at night when it is cooler. It has sensitive hearing to detect insects underground.

The elf owl has a small body with grey-brown feathers.



It nests in holes in cactus plants for shade and protection. It hunts for insects at night when it is cooler.

The sandy coloured fur of the **desert fox** reflects heat during the day and its large ears help it to keep cool. It hunts at night when it is cooler, listening for underground insects with its sensitive hearing.

The **elf owl** has a small body and grey-brown feathers. It can fit into holes in cactus plants to find shade and a safe nesting place. It hunts at night when it is cool and usually eats insects.