

Habitats and Adaptations (KS2)



We know squirrels live in trees and worms live in the soil. Now we can find out how different plants and animals are so well suited to their homes.



Learn how ecosystems are made up of habitats and micro-habitats, from leaf litter to the tree canopy, and how each creature and plant has specific characteristics to survive in these habitats. Discover how these adaptations create the wide variety of wildlife we have outdoors.

What you'll need

- An area outside with trees/bushes
- Learning resources 1–5 in this guide
- Pen/pencil
- Clipboard

Subjects

Science, English, and Creative Thinking

Learning Objectives:

- Living things and their habitats
- Scientific reasoning
- Plant and animal identification
- Labelling a scientific drawing
- Adaptation in nature
- Creative thinking and different perspectives
- Collaborative thinking

Lesson Plan:

Warm-up/Introduction

Have a good ol' chat about creatures' homes, with questions to get children thinking and using their imagination. Prompt or help them if needed by pointing at different environments and places surrounding them outdoors.

Ask the group what the name is for the environment or place a creature lives (a habitat). Give/ask for examples of different habitats e.g. birds in gardens, worms in the soil, fish in streams.

Show resource 1 (desert habitat). Can the children imagine living there? What colours might they see? What does it feel or smell like, e.g. hot, bright, quiet, sweaty? Show resource 2 (woodland habitat) and ask the same questions.

Introduce the children to 'micro-habitats' – areas within a habitat that provide different conditions. As an example, point at a tree in resource 2 or nearby, ask the children to describe living on the bark of the tree, then describe living under the bark.

Can anyone think of more? E.g. under logs, on a leaf, in a tree stump, a leaf pile etc.

First activity: Identifying habitats

Using Resource 3, get into groups with a clipboard and pencil. Allow the children to spend a little time searching for different micro-habitats around them, listing each one with a sentence to describe what it would be like to live there.

Come back into a large group. While the children say what they found, highlight the importance of having lots of micro-habitats for all the different plants and animals. All the habitats together make an eco-system.

Using Resource 4, allow the children to identify each creature or plant and name all the ways they use their habitat e.g. for making nests, food, camouflage.

Refer back to Resource 1 & 2 and see if all creatures in Resource 4 could live in these habitats.

Introduce the word 'adaptations' to the children. How are the creatures in Resource 4 adapted to the woodland?

GOOD TIP:

Let the children find the answers by asking open questions such as: what parts of the creatures are best adapted for climbing trees? What parts are adapted for hiding from predators? How do they find their food?

Second Activity: Matching habitats with adaptations

Groups go back out and select a habitat

Using Resource 5, they can imagine a brand-new animal or plant that is adapted to live in their chosen habitat. They draw their new creature or plant. Encourage them to use their imagination!

They must label their drawings clearly and with descriptive words.

Get all the groups together and allow them to take turns to show their creature and demonstrate one adaptation their creature has for the habitat they live in.

Optional Post-learning task:

Discuss the adaptations of plants and animals in habitats that are used by humans i.e. plants grown for food/medicine and the insects adapted to pollinate them, building materials from woodlands and coastal habitats for wind farms and our holidays.

Ask the children what threats these habitats face, i.e. fires, flooding, deforestation. How will these threats affect creatures, will they lose their habitats or food sources?

Discuss how to protect habitats. Ideas could be; can we reuse products, not drop litter, not start fires, use our local woods to show people they are important and should be protected.

We would love to see your children learning more about trees! Share your photos with us on Instagram or twitter /cityoftreesmcr



Manchester
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Learning Resource 1: Desert Habitat



Learning Resource 2: Woodland Habitat



Learning Resource 4: Woodland creatures



Learning Resource 5:

Choose a habitat and draw a new animal or plant that would live in that habitat.

Remember to make sure the creature has good adaptations for your chosen habitat. This is a scientific drawing so labels are kept around the edge of the page with straight lines pointing to each part described.

Chosen habitat:

Creature's name:

