Connecting to Nature

Key Stage 1 and 2

These activities are taken from our *Habitats* session at Bolton Abbey. We've revised it for you to do at home, in any space you have. We hope you can get out in the fresh air, think about nature and how animals adapt to survive. It is also possible to feel connected to nature indoors. As with all of our resources, you do not need to start on page one and complete the full resource. Pick and choose what you want to complete. Where a partner is mentioned, this can be your parent, carer, or sibling.

What you will do: Use your senses to connect with nature, and explore and discover ways that animals adapt to survive.

What you will need: Paper and pencils; access to a computer or tablet, and/or any information books that you have about animals

Learning outcomes:

- Develop an awareness of the five senses
- Understand how animals use their senses to survive
- Be able to express your own opinions about nature

Bolton Abbey has been described as 'one of the finest wildlife habitats for miles around'.

Nature and Habitats Activity sheet

How do we connect with nature?

Nature is all around us – from the weeds growing by the doorstep to the huge variety of plants and animals living on small patches of wild land in cities as well as in the countryside. Nature connection is all about your own experience of nature; you don't need to be able to name plants and animals to make your own connection!

The five best ways to connect to nature are through:

- Senses
- Emotion
- Beauty
- Meaning
- Compassion

1. Let's get started by using our senses

Pause and notice nature, whether you are out in your garden or looking out of your window. You are going to tune in using all five of your senses.

Animals often have a better-developed sense of hearing, sight or smell than humans. How does that help their survival? You could do some research on this.

Sound: Cup your hands as if you're scooping up water, then tuck your thumbs in behind your ears. This helps capture the sounds around you (like the ears on a deer) Stand still and listen, then turn your head in different directions and notice the different sounds you can now hear.

There is something special about each of these animals' sense of hearing. Can you find out what it is and how it helps it survive?

Owl

Horse

Cat

Moth

Bat and Dolphin

Sight: Put your arms straight out in front of you and look straight ahead. Keep your eyes looking ahead while you slowly move your arms out to each side. Wiggle your fingers, and stop when you can no longer see them out of the corner of your eye. Everything that you can see around the edges of your direct gaze is known as your peripheral vision. Can you see your partner move around without looking directly at them?

Look at the eyes below. Can you spot the difference?

Cat   Goat

- A Cat's eye: gives good depth perception and night vision.
- A Goat's eye: gives the goat good periphery vision - it can keep watch for predators while it is grazing

Have a go at researching how other animals' eyes are adapted to help them survive. Can you find some whose eyes make them good predators, able to hunt other animals and some that are able to avoid being easily hunted? Use this space to record what you find in words or pictures.

Touch and smell

If you have a garden do this outside, or you can use flowers, a plant, herbs or fresh fruit in the house. Do this with adult supervision.

Close your eyes and ask your partner to lead you to three different plants (or ask them to bring them to you if possible).

Touch and smell each one and see if you can guess what it is (without eating it!). Use this space to describe what plants feel like and smell like. Be as imaginative as you can!

Taste

Many of us eat too quickly! Next time you have a snack, try this:

Put your chosen food on a plate in front of you. Use all your senses to explore it before you eat it – look, touch and smell it. Then put it on your tongue, notice the texture and also the taste. Don't bite it yet. Move it gently around your mouth, does the taste change on different parts of your tongue? Finally, bite into it (don't forget to listen to any sound it makes as you bite). Pay attention to the way the taste changes as you eat it, and notice any after taste. Sometimes this is described as *Mindful Eating* – giving full attention to just eating, which is something we often forget to do as we rush around our busy lives. Try it and see what you think and taste!

2. Emotion and Beauty

How do you feel as you notice nature? Find something that blows your mind! It might be a bee busily collecting pollen, a raindrop glistening on a leaf, a pattern on the bark of a tree…

Take a photo or draw a small detail of a living object that blows your mind. Show your partner and challenge them to find it. Then, invite them to share something with you. Nature is amazing!

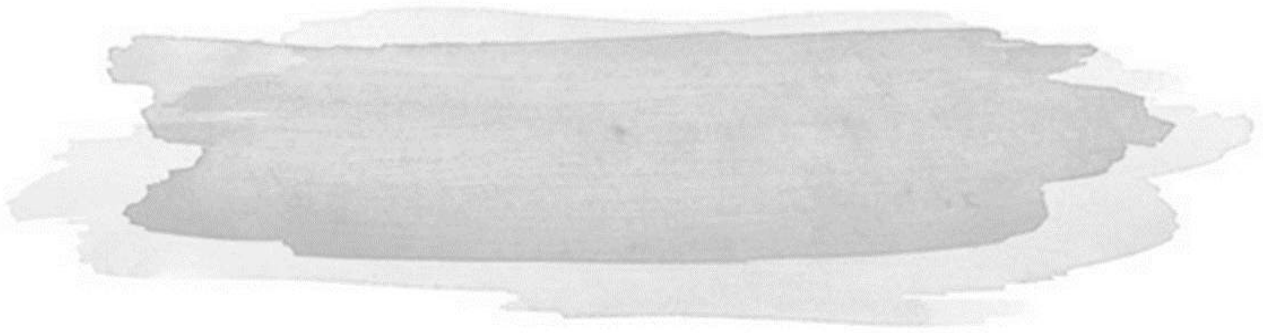
3. Meaning

Many artists and poets find nature inspiring. One famous example is the poem *Daffodils* by William Wordsworth. It's well known that he loved the Lake District, but did you know he also wrote poems on his visits to Bolton Abbey? *The White Doe of Rylstone* is an example.

Think about how you can record your own feelings about nature.

Use the space below to list some words to describe the things you have seen, heard and felt so far. Then, try turning them into a short poem.

You might prefer to paint or draw. Try sketching a plant in your garden, or a distant tree that you can see from your window. (See the art in nature activity sheet for more ideas.)



4. Compassion

We all need kindness in our lives and nature needs it too! Think about what you could do to help nature on your own doorstep.

Write down your ideas about helping nature here:

Tip: Talk to friends and neighbours, or use the internet to find out what food and plants would help the wildlife in your local area to thrive

Now think about what you could do in your wider community when the current crisis is over. What will you change?

Tip: Find out if there are any community groups running litter picks or growing vegetables in your area and think about joining in, or starting your own.

For parents/guardians or teachers

What is Nature Connectedness?

There is more to nature than identifying trees, plants and flowers or getting what you need from it to survive. Feeling part of nature is central to the idea of connecting with it and this resource is structured around using identified pathways to help children explore and discover this.

Our learning sessions incorporate the five pathways to nature connectedness as defined by the Nature Connectedness Research Group at the University of Derby. You can read about this here:

https://www.derby.ac.uk/research/about-our-research/centres-groups/nature-connectedness-research-group/

And Professor Miles Richardson, who leads the Research Group, has an engaging and accessible blog which you can catch up on here: https://findingnature.org.uk/

Here are some tips and pointers to help you support your child's learning and discovery for the sound and sight research activities in the resource.

The senses

Ages 5-7 (KS1): Children are fascinated by little things that might seem mundane to you!

When you talk about the senses, ask them to point to the body part they are using e.g. for smell point to their nose.

Sound

Ages 7-11 (KS2) research: The *sense of hearing* research in the **Sound** section of the resource is best suited to this age range. Here is some additional information, should you need it:

- Owls have ears that are not exactly opposite each other - one is slightly higher and further forward than the other. This allows the owl to hear sounds above and below, which is useful for hunting.
- Horses evolved good hearing to survive in herds in the wild. One horse always acts as a look out while the others are resting. Horses can move their ears in the direction of a sound.
- A cat's ear is controlled by 32 muscles (a human ear has 3 muscles). The cat can rotate its ear by 180 degrees allowing it to capture sounds all around it.
- Moths were recently named as the animal with the best hearing in the world, estimated as 150 times more sensitive than humans! This is useful for avoiding being captured by bats (their main predator) and other animals. Moths use echolocation – where a sound vibration hits objects and bounces back to them.
- Bats and dolphins use echolocation (see above for definition). This is useful for hunting and avoiding danger.

Sight

Here is some support information when researching how the eyes of some animals have adapted for survival.

Animals perceive light in different ways according to their survival needs. Some see ultraviolet or infrared light. Some can see in the dark much better than humans, and some see a wider variety of colours than we can.

These animals have exceptional sight:

- **Eagles**, **hawks** and **falcons** can see a rabbit up to approximately 2 miles away. The eye muscles adapt to keep the prey in constant focus while the bird flies towards it.
- Each eye of a **chameleons** can move independently of the other.
- The eye of an **owl** contains many more cells called rods than a human eye giving an owl excellent night vision. Its iris adapts to allow more light in at night. An owl's eyes can't move around within the socket like ours can, so the owl can move its head nearly all the way around.
- A **shrimp** has 12 – 16 different types of colour detecting cells known as cones (humans have 3).

The curriculum links for the nature and habitats activities

Science	**PSHE KS1 & 2**	**English KS2**
KS1 Say which part of the human body is associated with each sense Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) KS2 Construct and interpret a variety of food chains, identifying producers, predators and prey Identify how animals are adapted to suit their environment in different ways and that adaptations may lead to evolution	Build confidence and resilience in learning outside of the classroom;	Continual development of pupils' confidence and competence in spoken language and listening skills