

YEAR 1 UNIT 5: On Safari (Animals including Humans)

Enquiry Question: What is an invertebrate? What would you observe in an invertebrate habitat?

Related units: Reception: My World, what can I do to care for my world? Reception: Growing and changing, how have I changed? Year 2: Mini worlds – What are the similarities and differences between animals?

Unit overview

National Curriculum Link Year 1: Animals, including Humans
Children will identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. They will identify and name a variety of common animals that are carnivores, herbivores and omnivores. They will describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). Pupils will use the local environment to explore and answer questions about animals in their habitat, how to take care of animals and the need to return them safely after study. They will learn the names of the main body parts: head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth and teeth. This unit builds on Reception's experience of children knowing that different environments contain different living things and that living things, including humans, have a life cycle.

Assessment

1. Identify and name 4 common invertebrates.
2. Explain what a carnivore, herbivore or omnivore is
3. Explain a simple food chain.
4. Describe 3 similarities between humans and invertebrates.

Scientific vocabulary

- Invertebrate
- Vertebrate
- Carnivore
- Herbivore
- Omnivore
- Detritivore
- Insect
- Exoskeleton
- Thorax
- Antennae
- Abdomen
- Habitat
- Food chain

Activities and working scientifically

- Explore and answer questions about invertebrates and their habitats.
- Understand how to locate and care for animals taken from their local environment.
- Use observations to name and compare carnivore, herbivore and detritivore invertebrates first hand using their senses and through pictures or videos.
- Group invertebrates according to what they eat.
- Observe invertebrates closely using simple equipment and name the main body parts (including exoskeleton, thorax, antennae, abdomen, legs and head).
- Compare ourselves to invertebrates, recognising the variety of similarities.

Cross-curricular links

English: Label invertebrates.

Maths: To count invertebrates and record the data. Transfer survey data to create graphs to show how many carnivores, herbivores and detritivores they have found.

Teacher knowledge

Safari- For this topic children are invited to go on a safari. The word 'safari' comes from the Arabic word meaning 'journey', which is exactly what this is; a journey to hunt for animals.

Invertebrate- invertebrate is the correct scientific word to teach children. An invertebrate is a collective name for animals without vertebrae and insects are a subset of that group; they have three parts to the body, six legs and usually two pairs of wings. A vertebrate has a backbone (goldfish, robin, dog, cat, human) and invertebrate does not have a backbone (worms, ants and beetles). This is a basic classification that children will need to use as they move through their school years. Some invertebrates have an exoskeleton which is a hard body covering providing protection and support. Most children will be familiar with invertebrates like snails and ladybirds.

Comparing ourselves and invertebrates- There are some important considerations here. Some invertebrates, such as millipedes and centipedes as well as small flies, do not do well out of their own environment so are not the best ones to collect and temporarily remove. Spiders, ants, snails, slugs, worms, beetles and woodlice fare better if placed in materials from their habitat and are returned as soon as possible. Invertebrates and animals including humans use their senses to find out about the world around them (their environment). Other similarities include, eating, breathing and some invertebrates have eyes and legs.

Food chain- At this level food chains need to be very simple and engage a limited number of animals. Key to understanding food chains is to understand that it 'tells the story' of who is eating who- the order that organisms are eaten by each other. At this level children just need to understand there is the sun, plants, prey and predators. We show who is eating who by using an arrow. You will need to discuss with children that a food chain starts with the Sun. The plant does not eat the Sun. It gets its food from the Sun.

Habitats- A habitat is the place in which a plant or animal lives. The habitat must have everything that a living thing needs to survive such as shelter, food and water. Children can use their understanding of invertebrates to understand what would make a good habitat. Challenge the children to think about what they know about their invertebrate, e.g. Where did they find it? Was it dark and damp?

Carnivore, Herbivores, Omnivores and detritivores-- Carnivores eat mostly meat. Examples of carnivorous invertebrates are spiders, ladybirds and centipedes. Herbivores only eat plants. Examples of herbivore invertebrates are aphids, butterflies and grasshoppers. Omnivores are animals that eat both meat and plants. Examples of omnivore invertebrates are ants and wasps. Detritivores are animals that feed on decaying things such as dead leaves and animals, for example woodlice, earwigs and worms.

Misconceptions-

- Children think there are no similarities between invertebrates and Humans. In fact we share many similarities as many invertebrates have legs, heads, eyes and mouths. Invertebrates use their senses to eat and stay safe. Invertebrates breathe oxygen like humans too.
- Children think that only animals with exoskeletons are invertebrates. There are many invertebrates without an exoskeleton such as squid, octopus, worms, snails and slugs.

Resources

Habitats and the environment- <https://www.bbc.co.uk/bitesize/topics/zx882hv>

British invertebrates- <https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/animals/other-invertebrates/>

Planet ant- <https://www.bbc.co.uk/programmes/p00scslp>

minibeast activity pack- <https://www.tes.com/teaching-resource/free-minibeast-activity-pack-6043178>