



# On safari



## About this topic

Curriculum link: Year 1, Plants, Animals, including humans; Everyday materials

### SUMMARY:

Children go on safari to explore invertebrates and other plants and animals in the local area. This topic could be completed in half a term, choosing activities relating to children's experience and interests. It would be more appropriate carried out in the spring or summer months when there is a greater abundance of invertebrates for children to observe.

### UNITS:

- 5.1: Minibeasts, bugs or invertebrates?
- 5.2: Comparing ourselves and invertebrates

### ACTIVITY RESOURCES:

- 5.1: Safari observations
- 5.2: Bug questions

### ONLINE RESOURCES:

- Teaching slides (Powerpoint): On safari
- Interactive activity: On safari
- CPD video: On safari
- Pupil video: On safari
- Word mat: On safari
- Editable Planning: On safari
- Topic Test: On safari

## Learning objectives

This topic covers the following learning objectives:

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).

## Working scientifically

This topic develops the following working scientifically skills:

- Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment.
- Perform simple tests.
- Identify and classify.
- Gather and record data to help in answering questions.



## CROSS-CURRICULAR LINKS

This topic offers the following cross-curricular opportunities:

### English

- Use science-specific language when talking and writing.
- Draft and redraft sentences using punctuation about what they have done in science activities.
- Create a set of rules or instructions for going on safari and for looking after invertebrates.
- Create an estate agent style advertisement for an invertebrate habitat.
- Read and write poems about snails, bees, wasps.

- Children write a story as if they were an invertebrate living in the school grounds.
- Children write descriptions of having been shrunk by their teacher and coming across an invertebrate.

### Bug stories

- Snail Trail* – Ruth Brown.
- The Ugly Bug Ball* – Michelle Burns and Anissa Freeman.
- The Very Ordinary Caterpillar* – Garry Fleming.
- Butterfly Kiss* – Vicki Churchill and Charles Fuge.

### Numeracy and mathematics

- Symmetry.
- Counting invertebrates.
- Survey how many invertebrates live in different habitats; use a tally chart.

- Transfer survey data to create pictograms showing the number of different types of invertebrates found in each habitat.

## Computing / ICT

- Carry out classification activities.
- Use a camera and video recorder.
- Use Easi-Speak microphones and an Easi-Scope microscope.
- Use Draw or Paint programs to create a new invertebrate. Then use the program to camouflage different invertebrates on a range of colour backgrounds.

## Geography

- Using a map of the school grounds, children locate different habitats.
- Children discuss how they can encourage and keep invertebrates in the school grounds.
- Children discuss how their actions can change the school grounds.
- Create maps to show where the invertebrate homes children have made have been placed.

## Drama

- Children role play how different invertebrates move, eat, etc.
- Children create plays about hunting for invertebrates or predator / prey.
- Children 'hot seat', taking on the role of an expert, e.g. an entomologist.

## Music

- Listen to the song 'There Was an Old Woman who Swallowed a Fly' in pairs or groups and make up their own version.
- Create 'Ugly Bug Ball' music.
- Create music and sounds to represent an invertebrate.

## Art

- Look at symmetry in invertebrates.
- Make invertebrates using playdough or papier mâché.
- Paint pictures of invertebrates.

## Design and technology

- Design a brand-new invertebrate and its habitat.
- Design and make an invertebrate home (Bug Hotel) for the school grounds.

## PE

- 'Ugly Bug Ball' – create a dance for this. Moving like invertebrates.
- Working in groups to make invertebrate shapes and moving collectively.



## STEAM (SCIENCE TECHNOLOGY ENGINEERING ART AND MATHS) OPPORTUNITIES

### Invite into class

- Use university outreach – invite an entomologist to share knowledge about insects.
- Book 'The Bug Company' to show children and explain about a range of invertebrates.
- Artist to engage children in different approaches, e.g. sponge printing, modelling invertebrates. Create a large sculpture in the school grounds.
- Writer to create poems, descriptions or narrative for a video clip.

### Visit

- Different habitats to compare invertebrates living there, e.g. pond, woodland, seashore.
- Pet shop, garden centre, zoo with invertebrates.



## HEALTH AND SAFETY

Children should avoid placing their hands in their mouths when handling invertebrates and should wash their hands after handling them. Check with *ASE Be Safe!* for further advice.

In this topic children will be 'Going on a safari' to hunt for invertebrates. The activities in this topic relate to land invertebrates; however, if you have a school pond, many of the activities will also apply to pond invertebrates. Prior to the activity go on your own safari so that you know which invertebrates are in your school grounds or the location you will be working in, and so that you can collect books, videos and photographs of each type to support learning back in the classroom.

## SUBJECT KNOWLEDGE: INVERTEBRATES

'Invertebrates' is the correct scientific word; if children can learn 'Diplodocus' and 'Tyrannosaurus Rex', then why not 'invertebrates' – Particularly since it helps them to learn that a vertebrate has a backbone (goldfish, robin, dog, cat, human) and invertebrates do not have a backbone. This is a basic classification

that children will need to use as they move through the primary years. Good habits start early. Remember that invertebrates is the 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.

### SCIENTIFIC VOCABULARY: ON SAFARI

It is assumed that most children know, from their EYFS experience, words such as *ant*, *worm*, *fly* and *bee*, although they might not know how to write and spell them. You can download a Word mat of essential vocabulary for this topic from *My Rising Stars*.

**abdomen:** this is the third, last part of an insect and contains the digestive system (stomach), (reproductive organs) and sometimes a sting (e.g. bee and wasp)

**antennae:** feelers on the head that sense the surroundings and can be used to taste, see, smell and hear

**detritivore:** an animal that feeds on decaying things such as dead leaves and animals, e.g. woodlice and worms

**exoskeleton:** an external hard body covering, providing protection and support

**food chain:** the order that organisms are eaten by each other, most food chains start with a green plant

**habitat:** a habitat is where an animal lives

**head:** this is the first part of an insect, which has the eyes, mouthparts and antennae

**insect:** insects are invertebrate animals that have three main parts to their body: the head, thorax and abdomen, three pairs of legs and a pair of antennae on their head and usually two pairs of wings (although sometimes these are hidden)

**invertebrate:** invertebrates are animals without backbones

**thorax:** this is the middle part of an insect's body that has the legs (three pairs) and wings (usually two pairs)

**vertebrate:** animals that have backbones, e.g. fish, birds, mammals

**Key words:** abdomen / antennae / detritivore / exoskeleton / eyes / food chain / habitat / head / insect / invertebrate / jointed / key / legs / metamorphosis / pond / sections / thorax / vertebrate

### PREPARE THE CLASSROOM

#### Science laboratory

- White laboratory coats (white shirts) for children to wear. You could limit the number of these to help regulate the number of children using the area.
- Children's goggles or protective glasses to wear to help them take on the role of a scientist.
- Keep invertebrates in this area for study, e.g. giant African land snails, stick insects, butterfly larvae. Keeping live animals in the classroom encourages children to observe, discuss and record changes over time.
- Easi-Scope digital microscope identification keys.
- Collecting pots.
- Big Book to record observations.