

Upper Primary Habitat exploration

Curriculum Links

England National Curriculum

KS2 Science

- Working Scientifically
- Year 4 Living things and their habitats
- Year 4 Animals and Humans
- Year 6 Living things and their habitats

Scotland Curriculum for Excellence

Science: Planet Earth;

Northern Ireland Primary Curriculum

The World Around Us: Interdependence, Place, Movement and Energy, Change Over Time;

Wales National Curriculum

Interdependence of organisms;

Aims and Objectives

This habitat exploration live lesson introduces young people to the microhabitats present in their own garden. Through exploration pupils will learn more about the invertebrate species found there, and how the microhabitats might change throughout the year. FSC's expert field tutor will answer questions about these species. Submit your questions in advance to increase the chance of being answered, or you can submit live.

This teacher guidance is designed to support pupils with the pre-live lesson activities and the live lesson content for habitat exploration.

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Pre-lesson

Please advise and support your pupils to work through the pre-lesson preparation activities as preparation for the live lesson, this will prepare the students to get the most out of the live lesson. Please visit <https://encounteredu.com/cpd> for guidance on using these Live Lessons and Teacher Resources during school closures.

During the live lesson

Pupils should have their handouts ready, with the pre-lesson preparation elements completed. The live lesson handout will be used during the live lesson.

Post-Lesson Webinar

After the live lesson a teacher focussed webinar will share a range of resources and activities that can support pupils to continue their learning into habitats and invertebrates.





Fieldwork Method 1: **Invertebrate Fact File**

Use information sources to find facts about different invertebrates.

Students should first be encouraged to consider what an invertebrate is, and what invertebrates can be found in their garden. Students can use the boxes to create a fact card about common garden invertebrates. Some have been completed as an example, whilst others have space for students to complete their own research.

Websites for research:

- <https://www.dkfindout.com/uk/animals-and-nature/invertebrates>
- <https://www.nationalgeographic.com/animals/invertebrates>

A blank template has been included for students to create their own fact file. When this is completed students can use the fact files to play a game of “Top Trumps”



Fieldwork Methods 2&3: **Sorting and Classifying Invertebrates**

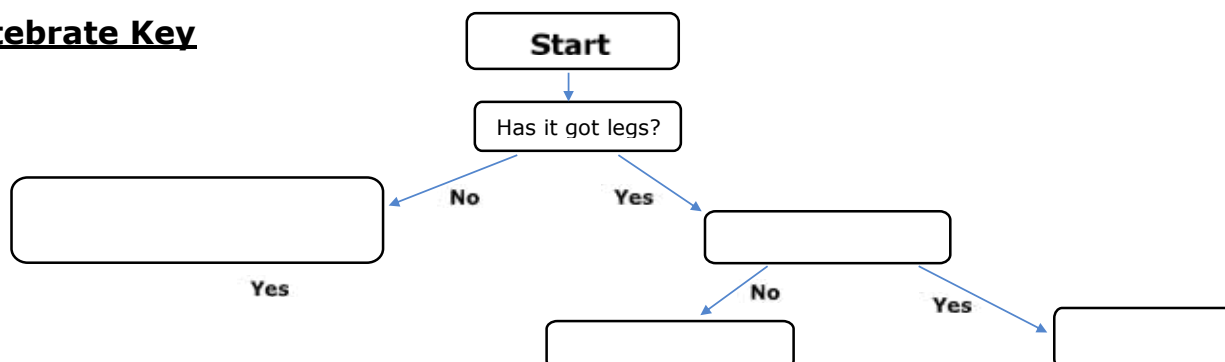
Students should use the invertebrate fact cards in the resource pack and the fact cards that they created themselves. Students should be encouraged to look at the invertebrates and identify their physical characteristics by which they can sort the invertebrates. For example, number of legs, does it have wings.

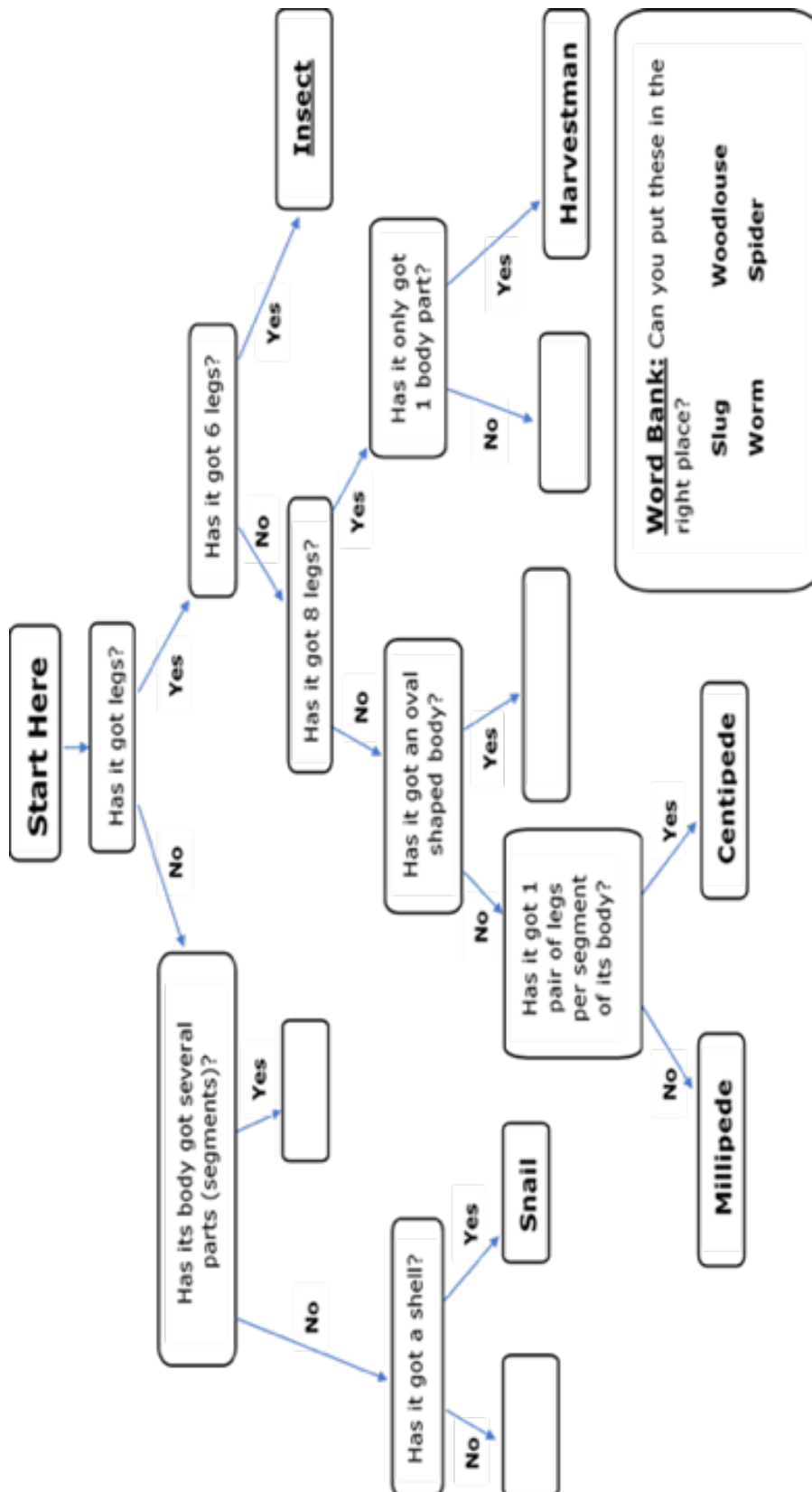
Once the students have had a go at sorting the invertebrates by their physical characteristics, they can put their skills to the test and use the classification key to classify the invertebrates into their different classes.

Once the students are happy with classifying their invertebrates, encourage them to start using the questions they came up with to create a simple identification key for their favourite animal or plant.

On the next page are a few differentiated examples of the identification key that you can use to support your pupils when completing the questions in the resource pack.

Invertebrate Key





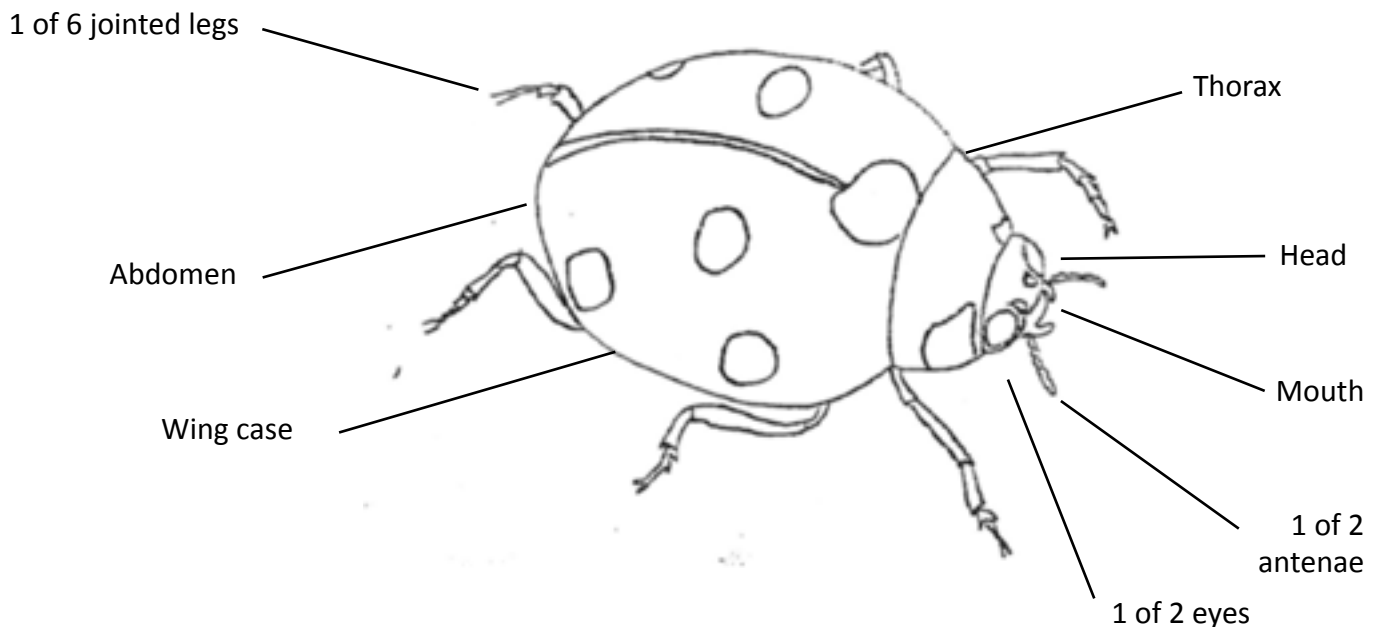


Fieldwork Methods 4: **Scientific drawing**

Students should use the space on this page to draw a scientific drawing of an invertebrate they have found. Below is some guidance to follow to help you and your students produce an accurate scientific drawing of an invertebrate.

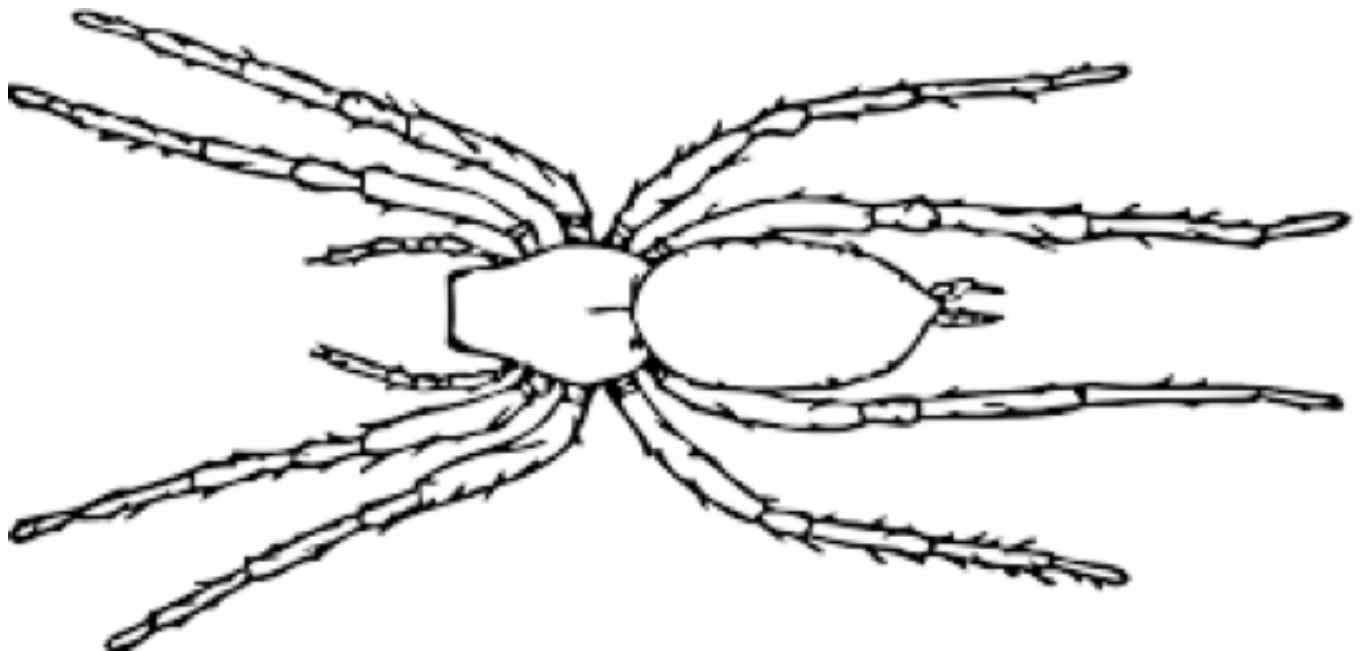
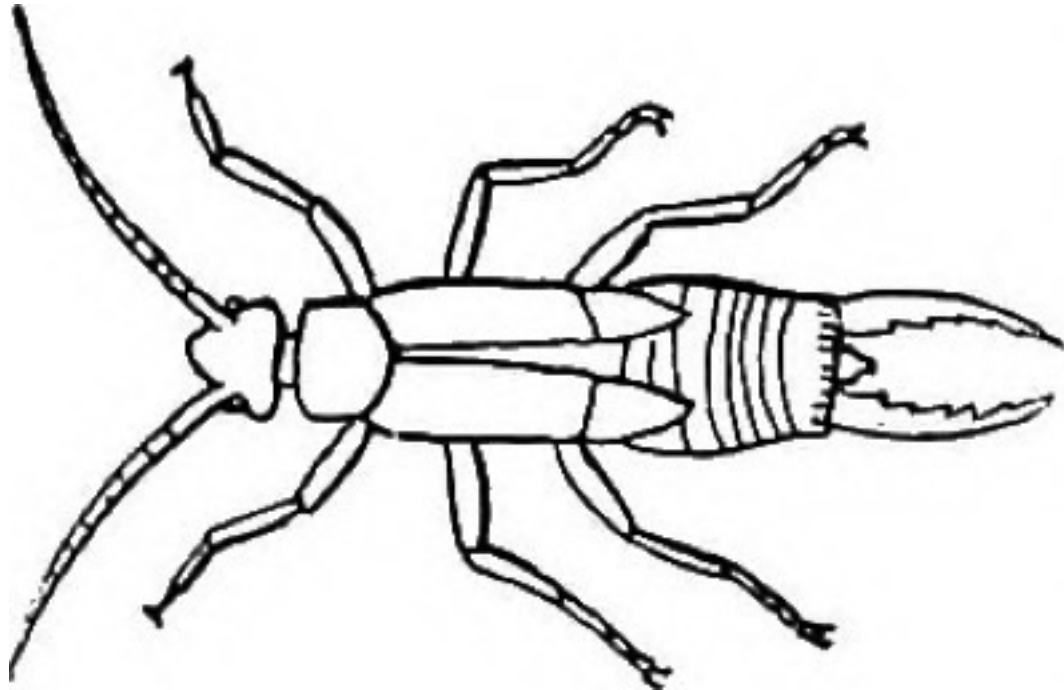
1. Ensure to have a sharp pencil,
2. Use white, unlined paper,
3. The drawing needs to be a line drawing not 3D,
4. Begin by drawing the outline of the invertebrate
5. The drawing should be an appropriate size for the paper used,
6. The drawing needs to be drawn using smooth continuous lines,
7. There should be no shading or colouring on a scientific drawing,
8. The invertebrate body parts should be drawn in proportion to each other,
9. When labelling the invertebrate use a ruler to draw straight line from the drawing to the label, try not to cross any lines.

Below is an example of a scientific drawing for your reference.





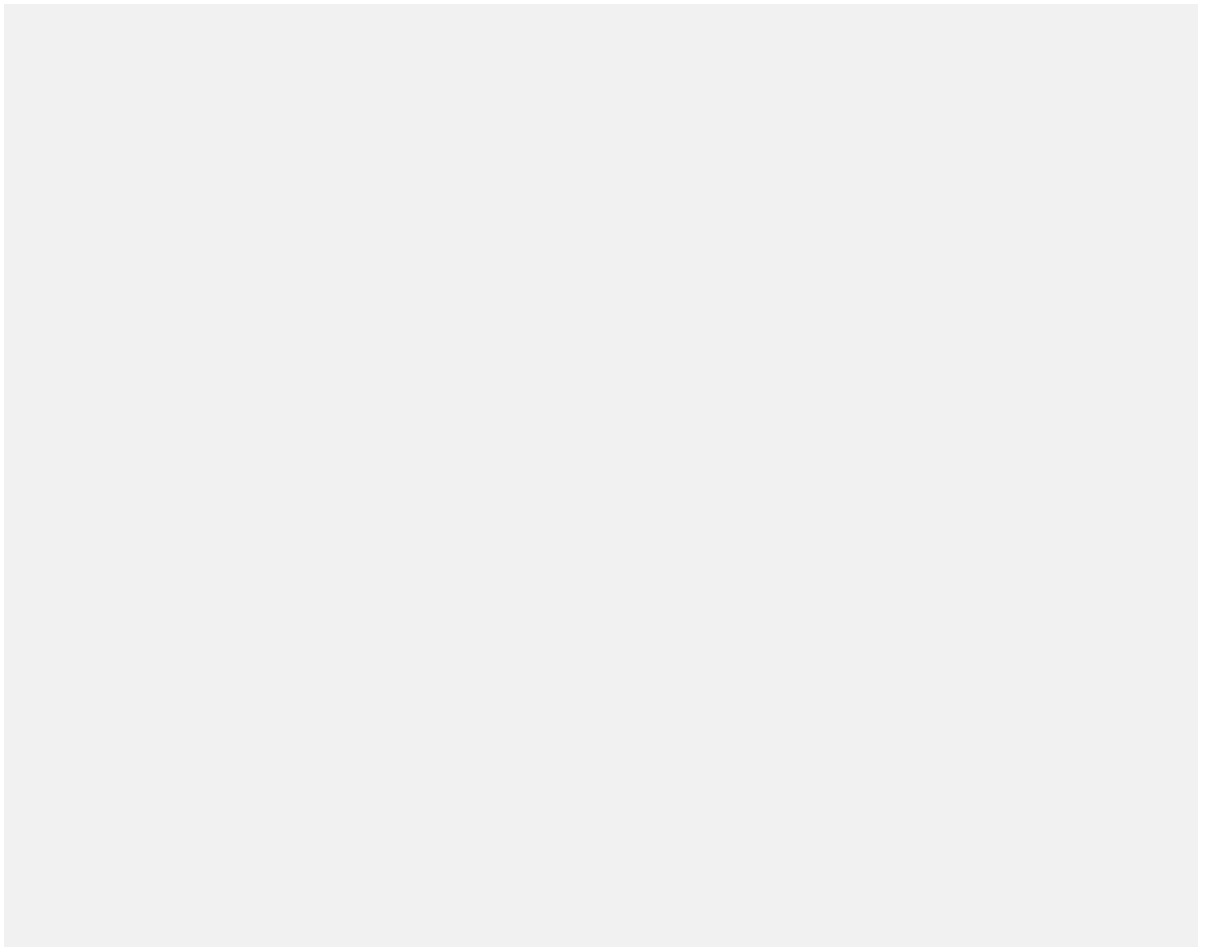
Below are a couple more scientific drawings of invertebrates. You can use these with you students if they need an extra challenge or if they find the drawing challenging.





Fieldwork Methods 5: **Microhabitats around your home**

During the live lesson students will be asked to create a frame to highlight the microhabitats that they can see from where they are. Pupils will need support creating this frame including cutting with scissors. You can use the template below, which has space for annotations around it, or students can create their own and chose the shape and size that they would like. Students may want to add annotations about how the scene will change through the seasons, or how the environment could be enhanced to support invertebrates.



This section of the resource pack also has questions to encourage the students to think about how to enhance areas such as gardens to increase invertebrate biodiversity and consider the impact that has on wider wildlife. A link is provided to the OPAL website where you can take part in various surveys and submit the results to support further understanding into habitat management and invertebrate populations.

www.opalexplornature.org