

About the Activity

This activity gives participants the opportunity to focus on the ways in which plants and animals adapt to a river environment. Using kick sampling they will test the changes in invertebrate populations at the source, middle and mouth of a river. They will be able to determine the relationships that exist between organisms and their environment.

Experimental and investigative work includes:

- Making observations and measurements.
- Turning ideas into a form that can be tested.
- Using results to make deductions and suggesting reasons for these using scientific knowledge and understanding.

Activity Aims

The aim of this activity is to:

- Ensure that participants recognise that organisms should be treated with sensitivity.
- Identify a variety of stream invertebrates using a simple dichotomous key.
- Compare organisms that live in different parts of the river habitat and suggest reasons why they can only live in a particular place.
- Understand that animals and plants have adaptations to their environment e.g. feeding and breathing mechanisms.
- Understand how river characteristics change from source to mouth.

Learning Outcomes

Upon completion of the activity, participants will have:

- Understood changes in river characteristics
- Observed conflicts arising from use of a river
- Named a few of the organisms that live in the river
- Identified organisms using a simple key
- Recognised that different animals and plants live in different habitats
- Observed conflicts arising

Progression Opportunities

Some participants may also:

- Distinguish the adaptive features of a number of organisms and recognise that not all species are found in the same habitat
- Recognise conflicts arising from human use of the land

In addition, participants should also have developed in the following:

- Teamwork
- Interpersonal communication

Associated Vocabulary:

- **Words and phrases relating to habitats and feeding relationships** e.g. consumer, producer, predator, prey, food chain, key, adaptations
- **Words relating to a river** e.g. bank, course, source, middle, mouth, meander, sediment.
- **Expressions for summarising and generalising.**
- **Words relating to life processes** e.g. cycles, nutrition.