

About the Activity

This activity investigates different habitats concentrating on the habitat's characteristics, the organisms found there and their adaptations. Pupils will collect data on humus layer depth, soil type, soil pH, soil moisture, infiltration rate, temperature, wind speed and light levels as well as use dichotomous keys to identify the organisms found in the habitat. This data will then be used to compare the habitats and discuss why the organisms are found in their particular habitats.

Activity Aims

The aim of this activity is to:

- Introduce the Habitats: Soils, Plants and Adaptations activity.
- Introduce the equipment needed for the activity.
- Allow each participant to collect, record and analyse data.
- Ensure participants work together supporting and encouraging each other.
- Provide an opportunity for participants to discuss what they have accomplished.

Learning Outcomes

Upon completion of the activity, participants will have:

- Identified and described different habitats.
- Used keys to identify organisms found in the habitats visited.
- Recognise that different organisms occur in different habitats.
- Described the different factors that make up a habitat.
- Understood the particular conditions that make up each habitat visited.
- Understood the adaptations of a variety of organisms and how they relate to the habitat the organism was found in.
- Recognise food chains within a habitat.
- Understood the importance of safety, risk, risk assessment, hazards and rules.
- Demonstrated the ability to listen to, understand and act on instructions received.
- Understanding of the importance of teamwork.
- Consolidated and then improved abilities such as fieldwork skills through performance.
- Contributed to a post activity review led by the instructor identifying what they did well and then suggested ways to improve.

Progression Opportunities

Some participants may also:

- Recognise food webs within the habitats.
- Understand that all food chains begin with a producer.
- Be able to describe the process of photosynthesis.
- Make accurate predictions on what types of organisms they will find in a habitat.
- Take the initiative in evaluating their performance and that of the group.
- Be able to assess risks and understand how these may be controlled.

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

- Interpersonal communication
- Teamwork

Associated Vocabulary:

Words relevant to safety e.g. boundaries, hazards, risk assessment, rules.

Words relevant to equipment e.g. anemometer, bug pot, digital camera, identification key, infiltration kit, light meter, metre ruler, moisture meter, pH kit, sample tray, soil auger, soil type chart, sweep net, thermometer.

Words relevant to the activity e.g. carnivore, condition, consumer, detritivores, food chain, habitat, herbivore, humus layer, nutrients, organism, photosynthesis, predator, prey, producer.

Words relevant to teamwork e.g. discussion, instruction, listening, opinion, participation, responsibility understanding.