New Forest Food Chains

Aim: For students to learn about the plants and animals found in woodland ecosytems and examples of woodland food Webs

Learning Objectives

- Name some plants and animals found in British woodlands
- Describe the feeding relationships between living things
- Create a food chain for a woodland ecosystem

Curriculum Links

- National Curriculum Science

Materials and equipment

- Worksheet
- Small cards
- Hole Punch
- String

Key Vocabulary

Forest, Woodland, Food Chains, Food Webs, Predators, Consumer, Producers, Herbivore, Carnivore, Omnivore

Lesson Plan

Starter – What lives here?

Show a selection of photos of plants and animals from a variety of habitats and ask students to identify which can be found in British woodlands. MAT students may be able to name the species. Ask students to identify which animals might eat which plants. Discuss the terms herbivore, omnivore and carnivore. Ask students to identify which animals are herbivores, omnivores and carnivores.

Activity 1 - Identifying food chains

Give an example of a food chain, and outline that all energy comes from the Sun with the process of Photosynthesis enabling energy to enter the food chain. Introduce the term producer, and explain that producers start our food chain. Discuss the use of arrows to show the direction of energy transfer or 'eaten by'. Introduce the term consumer as those animals which feed on the producers, or on other animals. Extend for MAT – Primary consumers are those which eat the producers in a food chain, Secondary and Tertiary consumers eat other animals.

Ask students to complete the attached worksheet; putting food chains in the right order to show the flow of energy. MAT students can progress to question 2 and 3. Less able students may benefit from having images of the animals and plants in front of them.

Activity 2- Food Chain Mobiles

Organise students into groups of three, assigning each group a food chain from the worksheet (or one of their own making). On small cards, each student draws the organism on one side, and on the reverse, completes the following information: Name, What is eats, What eats it, Herbivore/Carnivore/Omnivore, Producer/Consumer.

Students should then build their food chain by putting a hole in the top and bottom of each card, and connecting them using string.

Plenary

Ask students what would happen if you removed one of the animals / plants from the food chain. Discuss how humans can affect the plants and animals in a woodland, and that The New Forest has protected status, to help prevent adverse changes to the ecosystem.

Extension

Develop the idea of food chains by demonstrating how all the chains join to form a web. This can be achieved by asking each group to read out their food chain, and adding their information to a white board. Discuss with students how quickly the web becomes complex, and how in this situation, the removal of one species can have a bigger effect than when we look at a food chain.