

Food web mobile



This lesson will focus on the food chain and require the students to think critically about the roles of animals, their habitats and basic evolution. The children will have to think of the types of food that animals eat, be it other animals, insects or plants, and how the food chain can be unbalanced.

+ KS2 Science Lesson Plan 1 hour

Equipment

- String
- Scissors
- A wire coat-hanger for each child (optional)
- Coloured pens
- Paper
- 3 sticks, or dowel rods, for each child: 1 x 30cm, 2 x 10cm
- Sticky tape
- Images of common native animals (optional)

Key learning outcomes

- Understanding evolution
- Knowledge of common species
- Understanding of how habitats change and the effects this has on animals
- Understanding habitats
- Logical project planning
- Understanding a food chain and food webs
- Use of reasoning and rationale
- Use of advanced terminology
- Ability to group living things (and to justify their groupings)

Health & Safety

- You may wish to blunt the hook of the coat-hanger, or pierce a chunk of rubber on the end.
- Ensure the children are constantly observed throughout this exercise.
- You may wish to set up a 'cutting table' where the children must go to use the scissors and where the scissors must stay for the duration of the lesson.

This activity is best done with teaching assistants present due to the children using sharp equipment

Time	Activity
5 mins	■ Lead a discussion about animals and the food they need. The children should be aware of the concept of a food chain. They should realise that there is a logical order to a food chain: that plants are eaten by herbivores, and herbivores by omnivores and carnivores. Sometimes, carnivores are eaten by other carnivores.
5 mins	■ Lead a discussion about consumers and producers. Plants (producers) are eaten by their primary consumer (herbivore), which in turn are eaten by secondary consumers. The chain ends with the top carnivore (tertiary consumer). ■ The children will need at least one of each type of producer and consumer.
20 mins	■ The children should plan their model first on paper. ■ Beginning with a plant, berry or leaf, the children must decide 2 primary consumers that would eat it. Then they must think of 2 secondary consumers that would eat the primary consumers and 1 tertiary consumer that will end the chain (i.e. a fox, bird of prey etc.). ■ They must then plan their web. Is there any overlap with consumers? If their secondary consumer is omnivorous, would they also eat the producer? Would their tertiary consumer also eat the primary consumer?
30 mins	■ The children should then draw, colour and cut out pictures of their chosen plants and animals. Scale is important, so their top carnivore should be proportionally bigger than their producers. ■ Beginning with their tertiary consumer, the children should stick this on their coat-hanger if using. If not, then attach to a loop of string and stick a stick across the back for support. String should be used to dangle the children's pictures in order of the food chain underneath and to connect all paths through the web. Sticks should be used for support
Homework	The children should write a report on one side of A4 paper about the effects of habitat change on the food web. If one animal in their web is removed from the habitat, what would happen to the rest of the animals.

