

Make a Pond Food Chain



Learning Intention

 Learn to create food chains and understand that plants and creatures in a habitat are interdependent.

National Curriculum Skills

Science Interdependence of living organisms in those two environments and their

representation as food chains.

ESDGC The natural environment.

Activity Outline

* Review the concept of a food chain.

* Discuss the interdependence of creatures that live in a pond.

* Learn the terms consumer and producer.

* Sort creatures into groups.

* Create food chains using picture cards.

* Begin to understand a food web.

Resources

Pond & creatures pictures

<u>www.microscopy-uk.org.uk</u>/ has a great pond life identification kit - particularly for identifying small and microscopic life.

<u>www.harcourtschool.com/activity/food/pond_activity.html/</u> has an online activity for creating a pond food web.



Make a Pond Food Chain

Lesson Outline

What did you eat for dinner last night?

- Break the children's answers down into individual ingredients and write them on the board.
- Introduce the terms producer and consumer.
- Discuss where the food comes from.

Which of the foods comes from plants?
From animals?

 Explain that producers are plants - organisms that make their own food through photosynthesis, and consumers are animals - organisms that eat producers or other consumers.

Which animals eat plants? Other animals?

- You could break the consumer group down further explain the terms herbivore, carnivore, omnivore.
- Hand out some animal cards ask the children to colour code them into groups, write the colour code on the board - green = producers, yellow = herbivores, red = carnivores, orange = omnivores.
- When the children have finished colour coding the pictures, ask the pupils to find a food chain using the picture cards.
- When they have found a food chain they could make a note of it on paper.

Adapted from Mysciencebox.org

How do the animals and plants need each other in the pond?



Pike is a freshwater fish, it eats smaller fish, insects and amphibians such as newts or frogs.



The Grey Heron preys on fish, frogs, and other aquatic species



Water fleas are small crustaceans. They are found in fresh waters. They mostly eat small algae and microscopic plants.



The Pond snail is found in slow-moving or stagnant water. They feed on algae and organic matter.



Mayflies are aquatic insects. They feed on algae although there are a few predatory species.



Tadpoles are a stage of the amphibian life cycle. Most tadpoles are herbivores and eat algae and plants.



The Water Boatman is a small green insect with large reddish eyes. They eat tadpoles, small fish and aquatic insects.



Algae are a large group of simple organisms. They are photosynthetic like land plants.



Pondweed is a freshwater plant.



Southern Hawker Dragonfly adults prey on insect such as gnats and midges and will also tackle large prey.



Dragonfly larvae live in the water for up to 5 years. They are carnivorous and eat many aquatic animals such as insect larvae and tadpoles.



Common Frogs eat a great variety of animals including insects, spiders, worms, slugs and tadpoles.



Water-soldier is a very unusual looking plant. It has narrow, sword-shaped leaves and creamy white flowers. It is rare in the wild.



Rigid Fornwort is a floating aquatic plant. It is a useful plant for water spider, water beetles, dragonfly larvae ad other small aquatic animals.



The stickleback is a fish with no scales, although some have bony armour plates. They feed on small crustaceans and fish larvae.



The flatworm lives on the pond bottom. Although tiny, it is carnivorous and eats small insects and crustaceans.



The Great Diving Beetle is a large black beetle. They are found in ponds with plenty of vegetation. They are predators and eat tadpoles and very small fish.



A Water Spider lives on a diet of insects.