

Science – Who’s The Predator?

Recap what you have learnt about the different diets of animals: carnivores, herbivores and omnivores. Explain what each word means. *What sort of a diet do most humans have?* Omnivore. (Remind them that some people choose to be vegetarians and avoid meat and some people choose to be vegans and avoid all animal related foodstuffs. This is close to being a herbivore but a herbivore has no choice and can only survive by eating plants.) Another way we can classify animals is as a predator or prey. A predator is an animal which kills and eats another animal. The other animal is its prey. For example, a fox is a predator and its prey may be a rabbit or a pheasant. Point out that some animals can be both. Write down ‘tomato plant’, ‘greenfly’, ‘ladybird’, ‘shrew’ and ‘badger’. Which are the predators and which is the prey? A ladybird (predator) eats greenfly (prey), but a ladybird (prey) might then be eaten by a shrew (predator) which in turn (prey) may be eaten by a badger (predator).

Explain that there is a third type of living thing too - a producer. Producers are usually green plants which produce nutrients (food) by photosynthesis. Herbivores eat the plants and then they are eaten by carnivores or omnivores, so the food (energy) is passed along the ‘chain’. Omnivores eat both plants and animals. Animals can also be classified as consumers, either primary consumers (herbivores) that eat the producers, i.e. plants, and secondary consumers (carnivores) that eat animals. Play the [BBC clip about food chains](http://www.bbc.co.uk/education/clips/zpnhqty) (<http://www.bbc.co.uk/education/clips/zpnhqty>). Pause the clip at 3.23mins ‘What will happen if one plant or animal in a food chain is removed?’.

Discuss the impact of the scenario on the food chain they are presented with (see session resources). ‘Which animal would there be most of in this habitat?’ ‘With nothing eating the top predator, what will stop them from taking over?’ Who is the primary consumer? The secondary consumer?

Watch the end of [the BBC clip](https://www.theguardian.com/science/grrlscientist/2014/mar/03/how-wolves-change-rivers). Explain that there are some land owners in Scotland who want to re-introduce wolves in the area as a way of controlling the deer population. Is this a good idea? All of the changes to food chains discussed before are because of humans – what can we do to stop this happening in the future? Watch the [clip about wolves at Yellowstone Park](https://www.theguardian.com/science/grrlscientist/2014/mar/03/how-wolves-change-rivers) (<https://www.theguardian.com/science/grrlscientist/2014/mar/03/how-wolves-change-rivers>). Pause periodically throughout the clip and explain further if necessary – can a food chain really have such a huge impact? Why don’t they just cull the deer instead? If there are no deer, then the vegetation will take over. The deer also help with seed dispersal by eating berries, etc. All parts of the food chain are important for the living things in that habitat