

Animal Diets

Learning aims:

- Learn new words relating to diets of animals
- Discover different animal diets
- Understand that different diets require different teeth/adaptations
- Understand the concept of food chains

Activity 1: Language

There are 3 main types of diet when we talk about animals:

Herbivore - an animal that only eats plants.

Carnivore - an animal that only eats meat.

Omnivore - an animal that eats both meat and plants.

Task: Challenge your students to learn which different animals belong to each of these groups. For KS1 students, use images of different animals and ask the class to sort them into their diet types. For KS2 students, split them into smaller groups and challenge them to research animals for themselves that belong to each category. They can then present this information to the rest of the class in a creative way such as a poster or PowerPoint.

Additional activity: Did you know that there are other more specialised diet types?

Frugivore - an animal that only eats fruit. This is a type of herbivore.

Detritivore - an animal that only eats dead/decaying matter such as leaf litter. This is a type of omnivore.

Insectivore - an animal that only eats insects. This is a type of carnivore.

Sanguivore - an animal that only eats blood. This is a type of carnivore.

Students can extend their task to these diet types.

Activity 2: Recipe Challenge

Challenge your class to either design a recipe for one of the animals they looked at in activity one, or to learn a real recipe and identify the meat and plant items in this recipe.

You can combine this with a cooking class i.e. creating vegetarian sandwiches for herbivores.

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Activity 3: Animal Dentists

Challenge your class to count their teeth using just their tongue - this is a fun, silly activity to get them laughing! Humans have 28 teeth (32 with wisdom teeth). Look up images of human teeth, a carnivore's teeth and a herbivore's teeth. Good examples would be dog and cow. Ask the students to identify any differences and similarities they see between our own teeth and those of the other animals. What diet type do they think humans belong to? The answer is, we are omnivores, our dentition tells us this because we have a mixture of tooth types.

Incisors - the flat teeth at the front of our mouth are for snipping food. Carnivores often use them for grooming their fur, where as herbivores use them for breaking off grass, leaves and twigs.

Canines - the triangular teeth toward the corner of our mouth are for shearing meat. Herbivores do not have these teeth.

Carnassials - humans do not have these, but carnivorous animals have these meat shearing teeth in place of molars.

Molars - the flattened teeth at the back of our mouth are for grinding our food. Herbivores have these in place of canines.

Pre molars - these are also used for chewing/grinding food in humans. These don't appear until around age 10, so your younger students may not have them yet!

Additional activity: Print out pictures of various different animal's teeth, without the description of which animal they come from. Challenge your students to decide which are carnivores, herbivores or omnivores based only on their tooth structure.

Activity 4: Food Chains

Food chains are a simple way to describe the interactions between animals and plants. Choose an example food chain to teach your class and explain how the energy is transferred from sun to plant (producer), to consumer.

Additional activity: For KS2 students, you can introduce terms such as "apex predator" and "decomposer".

Now introduce a few more food chains (enough for your whole class to be allocated an animal or plant each). Either print out photos of these plants and animals, or write name tags for each student randomly. Your class must now move around and find the other organisms in their food chain and order themselves correctly.

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Food chains are a very simplistic version of what really happens in the animal kingdom. Of course, not all sharks only eat fish, and not all fish are only eaten by sharks. This is where food webs come into play!

There are so many different branches to food chains that overlap and eventually look like a spider's web. If your students have grasped food chains, you can progress to food webs. You can either demonstrate this as a whole class on a whiteboard, or in smaller teams with their own sheets of paper and print outs of different animals and plants.

You can use an example on the internet and discuss the web with your class before assigning them the task if you think it needs more clarity.

Additional activity: Challenge your students to draw a food chain for their own life! Let them think about the food they had for lunch, or dinner the night before. They should be able to identify meat and plant products in their diet, and try to think about what their meat foods would have eaten.

Activity 5: True Blue

As a revision task, create a list of statements (some true and some false) related to their learning in this task. Place something blue at one side of the classroom or playground, such as cones or mats, and something red at the other side.

Call out each statement in turn. If the students think your statement is true, they should move to the blue markers. If they think your statement is false, they should move to the red markers. If they are unsure, they can remain in the middle.