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TEETH Z173

Teeth are found in the jaws of many vertebrates (animals with backbones). The primary function of teeth is to tear, scrape and chew food, although in some animals they are also used for fighting or defence. The teeth are embedded in jaws.

The shape of teeth is related to an animal's diet. The teeth of carnivores (meat eaters) have very narrow points or edges and no grinding surfaces. Omnivores (plant and animal eaters) have wedge - shaped front teeth (incisors) and rear teeth (premolars and molars) with broad grooves and crowned surfaces. Ungulates (hoofed animals) have wide molars with ridged patterns. Walruses and elephants have large tusks, which hang outside the mouth.

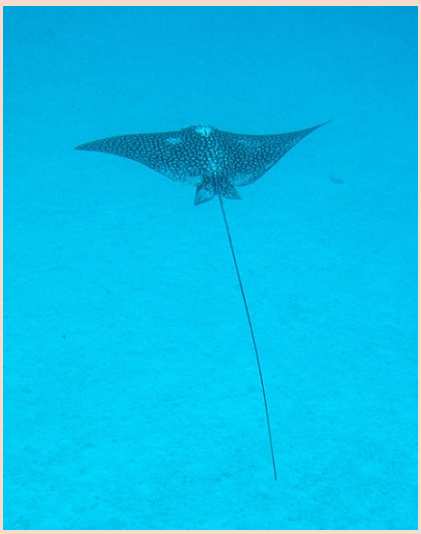
While humans develop two sets of teeth during their life, some animals develop only one set or many more than two. Some sharks, for example, grow a new set of teeth every two weeks! Teeth are not found in birds but modifications such as hooks, notches and serrations of their beaks serve to function as an alternative.

Ray jaws

Ray teeth are fused into plates that can crush the strongest clam shells. The rays crush the entire clam inside their mouths, spit out the shell and then eat the soft fleshy parts. If a tooth breaks or wears out, a new one replaces it. Rays grow new teeth continuously like sharks.







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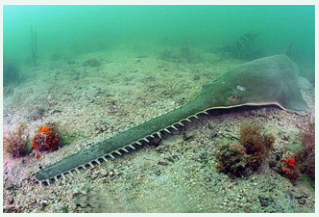
Sawfish saw, upper jaw

Sawfish are a family of marine animals related to sharks and rays. Their most striking appearance is a long toothy snout. Sawfish have been known to defend themselves with their saw against predators. The "teeth" protruding from the saw are not real teeth but modified scales.





Rabbit half jaw

Rabbits have six front teeth (incisors), four on the top and two on the bottom. The upper front teeth (called peg teeth) are hidden right behind the set that can be easily seen when looking in the mouth. These teeth are used for grabbing food and cutting it. The rest of the rabbit's teeth are in the back on either side of the mouth. These premolars and molars are used for grinding the food. All of the teeth grow continuously throughout the rabbit's life and are kept worn down by the action of chewing and grinding of tooth against tooth.

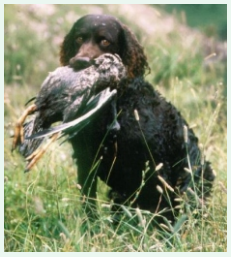




15 dog teeth

Dogs are predators and scavengers, with sharp teeth and strong jaws for attacking, holding, catching and tearing their food.





Cat half jaw

Cats are carnivores and predators like their big cat relatives. Cats generally catch their pray with their claws before killing it with a lethal bite to the neck with their long canine teeth, also called cuspids, dog teeth, fangs, or eye teeth. These teeth are used for tearing of meat. The premolars and carnassials (large back teeth of carnivores) on each side of the mouth are used for shearing meat like a pair of scissors.



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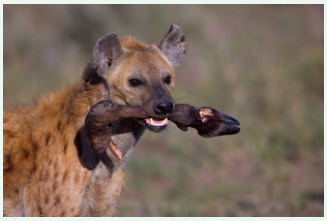
Hyaena tooth
Hyaenas have powerful carnassial teeth adapted for cutting flesh and strong premolars for crushing bone.





Badger half jaw
The badger's lower jaw is attached to the upper jaw by a transverse condyle (bone spur) firmly locked into a long cavity of the skull. This enables the badger to maintain its hold, but limits the jaw movement to open and shut, or sliding from side to side.



Walrus tusk
The most striking physical feature of the walrus is its long tusks. Walruses use their tusks to pull themselves out of the water, form and maintain holes in the ice. Tusks are slightly longer and thicker among males. They use them for fighting, dominance and display.




Horse tooth
An adult horse has six upper and six lower incisor teeth, adapted to biting grass or other vegetation, at the front of the mouth. They also have 24 premolar and molar teeth adapted for chewing at the back of the mouth.

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Pig tusk
Pigs have a full set of 44 teeth. The canine teeth, called tusks, grow continually and are sharpened by the lowers and uppers rubbing against each other. Tusks are longer among males.



Cow tooth
A cow only has incisor teeth on the bottom jaw. The top of the jaw is a hard pad. Together they are perfect for grazing. The cow takes a mouthful of grass, then grinds it back and forth between the jaws until a ball called a "bolus" forms and is swallowed to the first of four stomachs.







Calf tooth
A calf is the young of various species of mammal. The term is most commonly used to refer to the young of cattle. This calf tooth belonged to a cow.

Sheep half jaw
A mature sheep has 32 teeth. There are six molars and six premolars, all paired in the upper and lower jaws. The eight incisors are all in the lower jaw, biting against a hard, toothless pad in the upper jaw. A new pair of incisors grows every year to 4 years. It is possible to distinguish the age of sheep by examining their front teeth.





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Fossilised mammoth tooth

Fossils are the remains of creatures that existed long ago. Mammoths lived from 4.8 million years ago to around 4,500 years ago and most of them died out at the end of the last Ice Age. They were much larger than modern elephants. Mammoths reached a height of at least 5 metres and weighed 6 to 12 tons.





Indian elephant tooth

The largest Indian elephant was 7.88 metres long, stood 3.61 metres and weighed 8 tons. Unlike most mammals, which grow baby teeth and then replace them with a permanent set of adult teeth, elephants have a cycle of tooth rotation throughout their entire life. After one year the tusks are permanent, but the molars are replaced six times in an average elephant's lifetime.





Whale tooth puzzle

The teeth of toothed whales differ little between the species except in size and number. The sperm whale has 2,026 pairs of teeth in its lower jaw. Each tooth can weigh as much as one kilogram. This tooth was cut to make the puzzle.





Sperm whale

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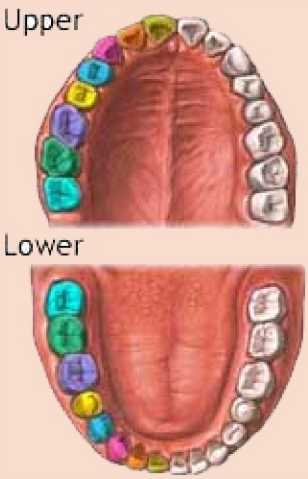
4 human teeth

Humans, unlike most mammals, develop two sets of teeth. There are 20 primary teeth (also called baby, milk or deciduous teeth) and 32 permanent teeth. All primary teeth are replaced except for molars, which are replaced by permanent premolars.



- Central incisor
- Lateral incisor
- Canine
- First premolar
- Second premolar
- First molar
- Second molar
- Third molar

4 human teeth X-rays

These are X-ray slides of human teeth. The teeth roots are also shown in the slides.

2 mystery items

The museum has no record of which animal these teeth belong to. What do you think?

