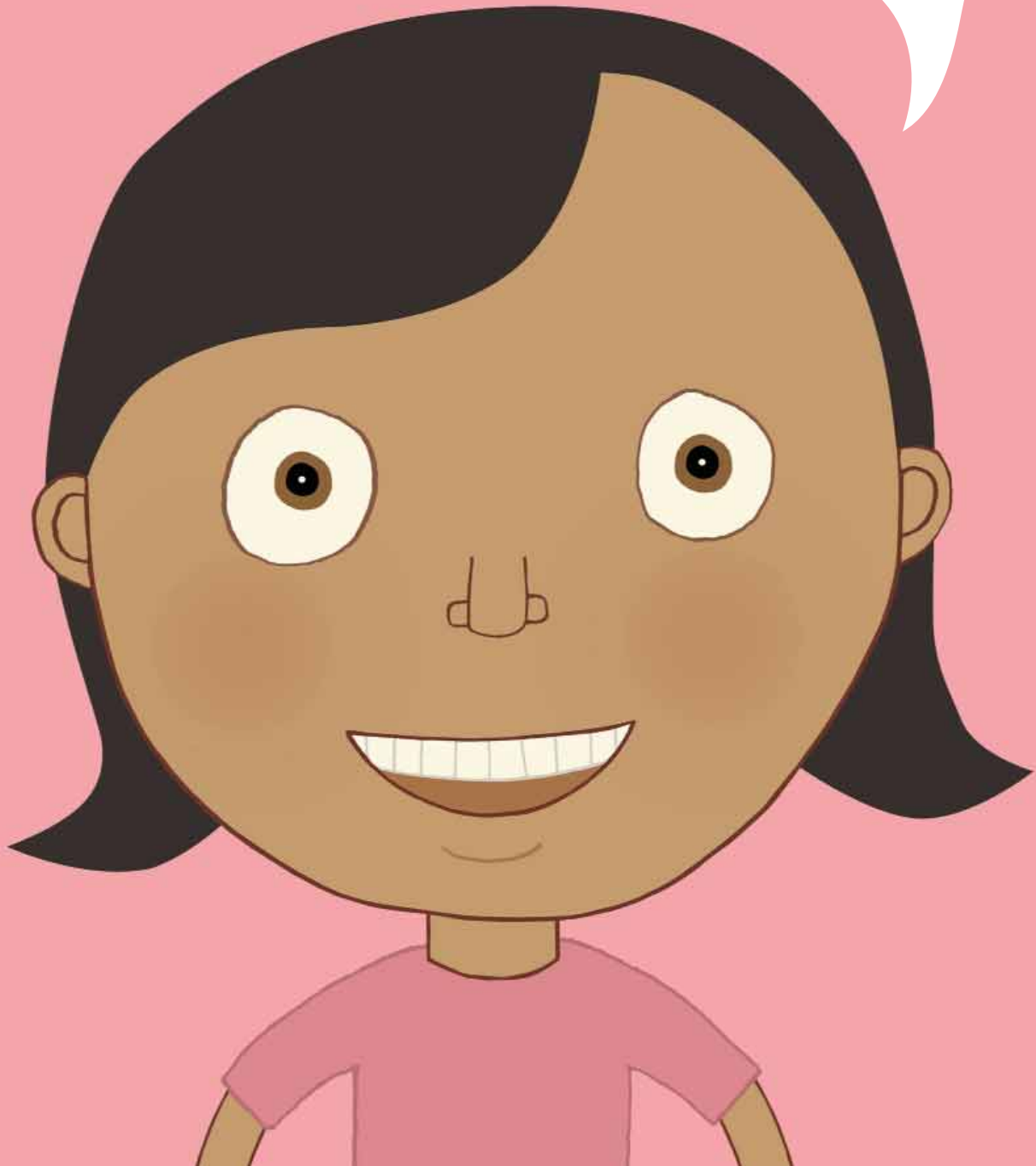


A seven part series exploring the fantastic world of science.

# TELL ME ABOUT TEETH



# Types of teeth.

Find out about the different types of teeth in your mouth.

## Milk Teeth

As a child you have **20 milk teeth**. Your **first tooth** appears when you are between **6 – 7 months old**. By **3 years of age** you have a **full set of milk teeth**. Between the ages of **5 – 6 years** your milk teeth begin to fall out and are replaced by **adult teeth**.

## Adult Teeth

**Adults** have a total of **32 teeth**: **8 incisors**, **4 canines**, **8 premolars** and **12 molars**. You will have the majority of your **adult teeth** by the age of **14**. Your adult teeth grow in the same place in your mouth as your milk teeth and are similar in appearance. The main difference between adult and milk teeth is that **adult teeth have roots**.

## Incisors

You have 8 incisors, 4 in the top of your mouth and 4 in the bottom. Incisors are flat teeth with sharp ends, which are used to cut and chop food into bite-size pieces.

## Canines

You have 4 canines, 2 in the top of your mouth and 2 in the bottom. Canines are the sharpest teeth in your mouth and you use them to tear food.

## Wisdom

These are the 4 molars that appear in your late teens – early twenties. These teeth are not very useful and adults often have them removed.

## Premolars

You have 8 premolars, 4 in the top and 4 in the bottom. Premolars are strong, flat teeth with ridges. You use these teeth for crushing and grinding.

## Molars

You have 8 molars, 4 in the top of your mouth and 4 in the bottom. Your molars are wider and stronger than your premolars and they have more ridges. Your molars are used to grind and chew your food and help with the first stage of digestion.

## Tongue

After your teeth have chewed your food, your tongue helps you to swallow your food.

## Did you know?

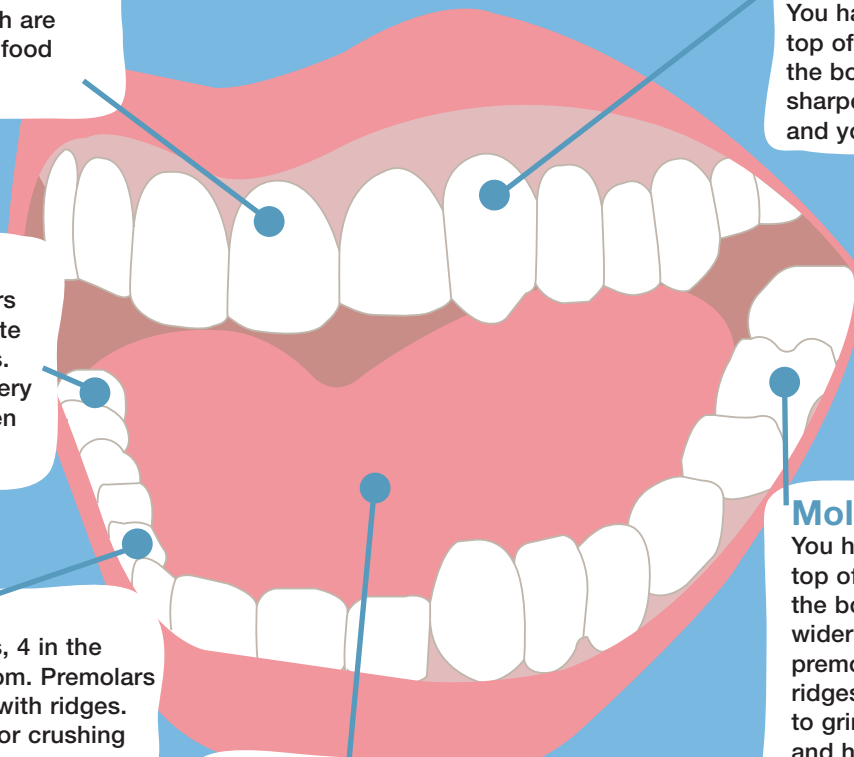
Sharks lose their teeth every week. However these teeth are replaced. This means that a shark can have over **20,000 teeth** during its life.

## Have a go!

Learn more about your teeth by completing the 'What's in your mouth?' activity sheet.

## Did you know?

Giraffes have 32 teeth, just like humans. Elephants go through **6 sets of teeth** in their lifetime, unlike humans that just have two sets of teeth.



# Structure of a tooth.

Find out about the different parts that make up a tooth.

## Teeth and Digestion

Your teeth are involved in the first stage of digestion. Teeth chop, grind and chew food that is then mixed with saliva. Saliva contains enzymes that begin to break down food.

### Crown

The crown is the part of the tooth that you can see above the gum. The crown of the tooth is covered in enamel.

### Enamel

## Did you know?

Enamel is the hardest substance in the body. It coats the outside of each tooth and protects the inner parts of the tooth.

### Pulp

The pulp of your tooth contains nerve endings and blood vessels, which keep the tooth alive and healthy.

### Dentin

Dentin is found underneath the enamel and makes up the largest part of the tooth. It helps to protect the soft tissue parts of the tooth, such as the pulp.

## Did you know?

If your teeth hurt when you drink something hot or eat something really cold, it is the pulp part of your tooth that feels the pain.

### Root

The root is the part of your tooth that you cannot see because it is hidden under your gum. The dentin and pulp stretches from the crown of a tooth down to the root.



## Did you know?

You will produce 20,000 litres of saliva in your lifetime. This means that you produce 3 times your bodyweight of saliva every year!

## Have a go!

Put your teeth and saliva to the test with the cream cracker challenge. How many cream crackers can you eat in one minute?

# Different animals, different teeth.

Find out why all animals do not have the same types of teeth and what they use their teeth for. The teeth in an animal skull can tell you lots about it. The type, shape and number of teeth can tell you about the animal's diet.

## Carnivores

- Cats, dogs and foxes are examples of carnivores. Their diet consists mainly of meat.
- Carnivores have long, sharp teeth which indicate that the animal is a predator. These sharp pointed teeth are called canines.
- Canines are used to grab, hold and kill prey. Canines also help to tear and rip flesh.
- Carnivores often have very small incisors and their molars are often more pointed, which they use to cut meat and bones.



## Herbivores

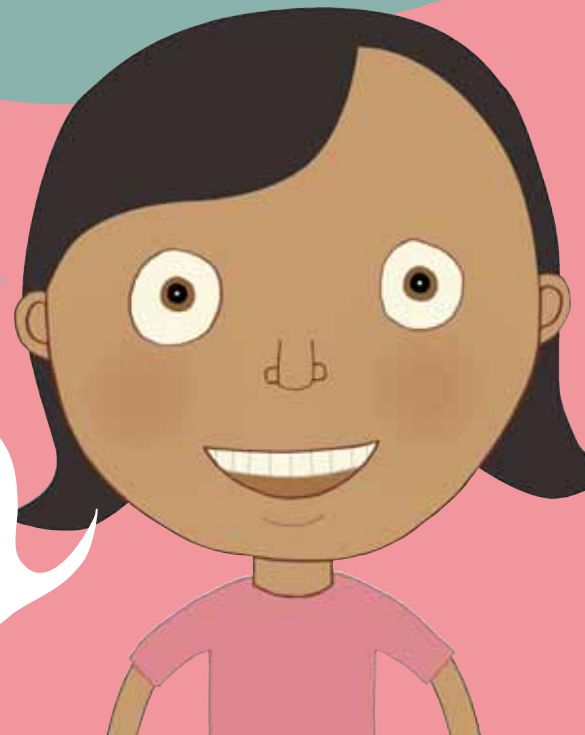
- Sheep, cows and rabbits are examples of herbivores. Their diet consists mainly of plant material.
- In order to digest their food properly, herbivores need to chew their food really well.
- Herbivores use flat, sharp incisors to snip and cut plant material.
- Herbivores also have large, strong molars that they use to chew and grind plant material.
- Herbivores do not have any canine teeth, as there is no meat in their diet. Instead the gap is called a diastema.

## Omnivores

- Pigs, bears and humans are examples of omnivores. They eat a varied diet of both meat and plant material.
- Due to their varied diet omnivores have all 4 different types of teeth, see the Types of Teeth page.

## Did you know?

That a rabbit eats its own poo! Since the diet of a rabbit mainly consists of plant matter, which is high in fibre and low in protein, the rabbit must digest the food twice to extract all the nutrients.



# Looking after your teeth.

It is really important that you look after your teeth, as you only have one set of adult teeth, which have to last you your entire life!

## Top tips for healthy teeth

- Brushing your teeth with fluoride toothpaste at least twice a day. It is particularly important that you brush your teeth before you go to bed.
- When brushing your teeth, it is best to brush up and down rather than side to side.
- As well as brushing your teeth, you should floss your teeth once a day, to remove plaque and food that your toothbrush cannot reach.
- Prevent tooth decay by eating fewer sugary snacks and drinks. Restrict sugary drinks to meal times.
- Visit the dentist and dental hygienist every 6 months for regular check ups.
- Keep your teeth healthy by including calcium, vitamin C and mineral salts in your diet.

## Have a go!

It is recommended that you brush your teeth for at least two minutes. Tonight before you go to bed, time yourself brushing your teeth for two minutes.



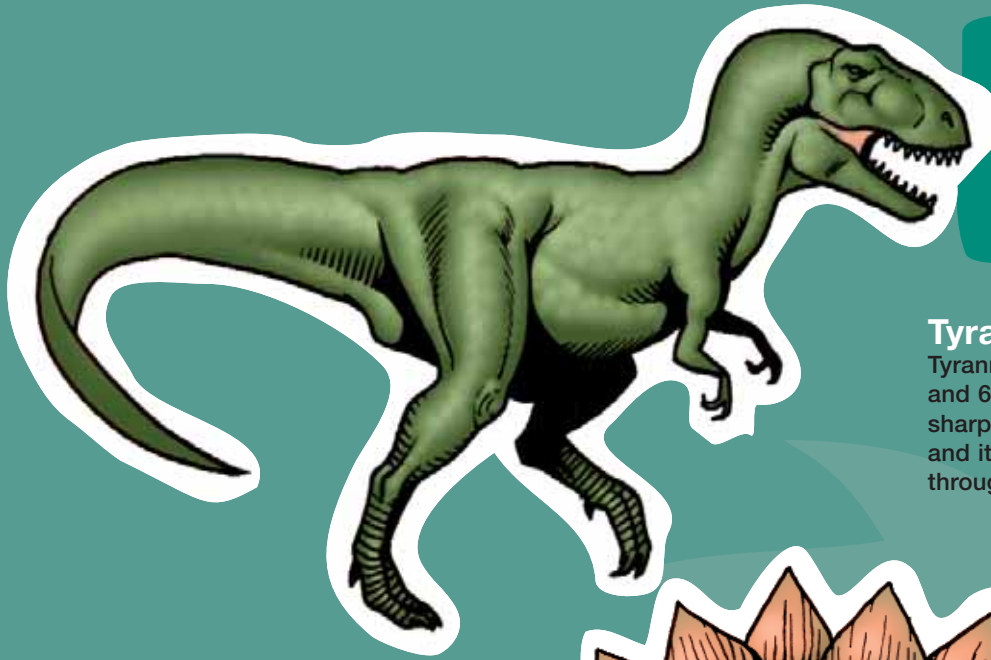
## Did you know?

Plaque is made up mainly of bacteria. The bacteria feed on the sugar in your diet and produce acid. The acid attacks the teeth and can eventually cause a cavity to form.



# Dinosaur teeth.

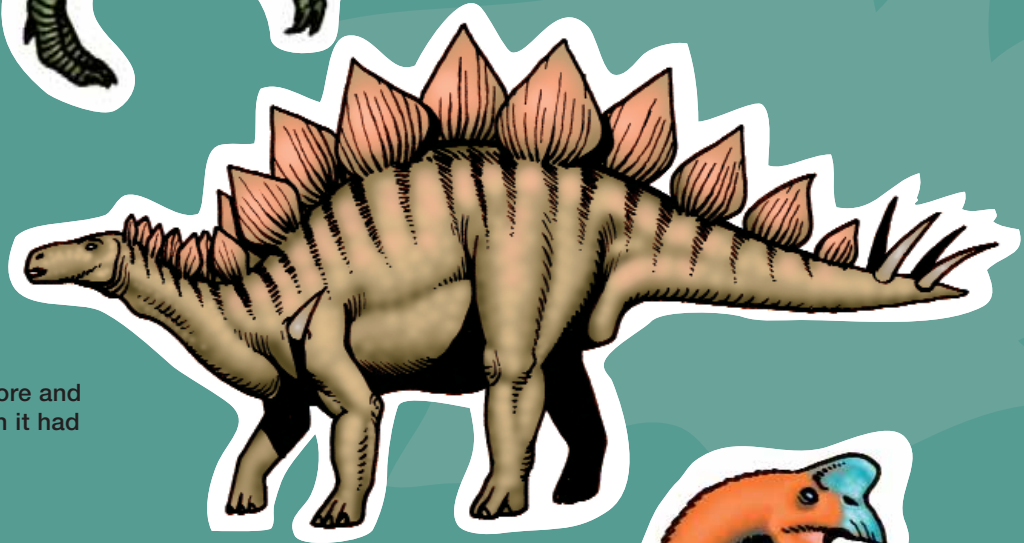
It is possible to learn about extinct animals from their teeth. Teeth are harder than bone, so they fossilise more quickly. There have been lots of examples of dinosaur teeth discovered. From these teeth it is possible to tell the types of food the dinosaur ate, how they obtained their food and their digestive systems. In fact some species of dinosaur are only known from their fossilised teeth.



The number of teeth a dinosaur had varied from none to nearly one thousand.

## Tyrannosaurus rex

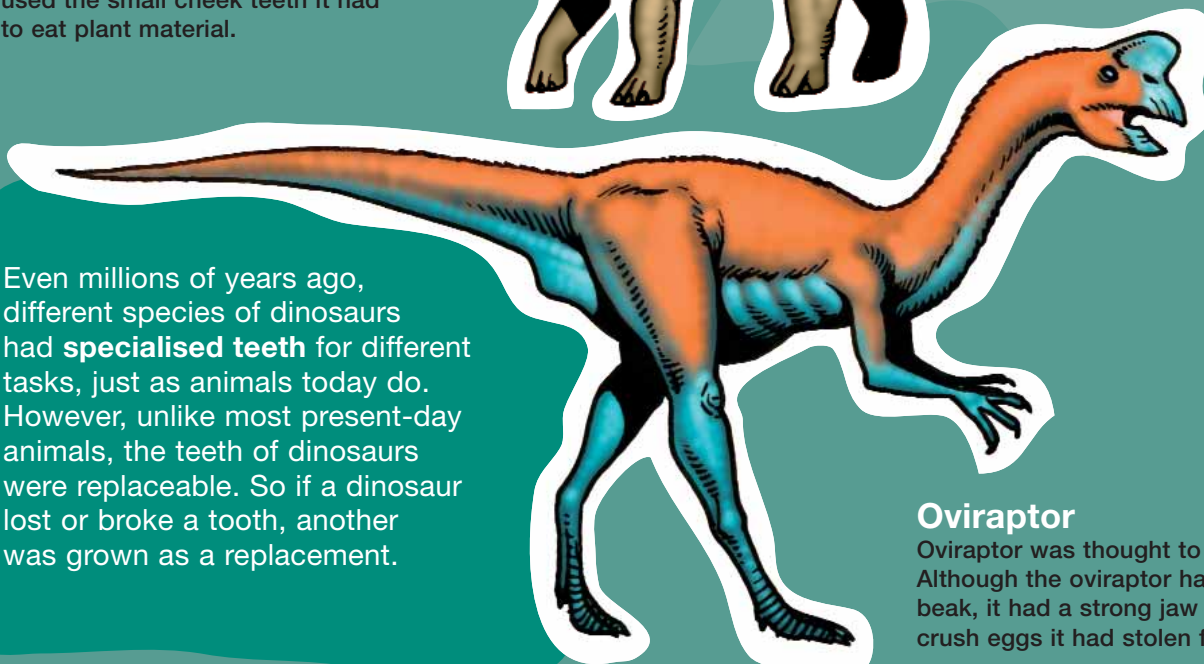
Tyrannosaurus rex had between 50 and 60 teeth, which were thick and very sharp. T-rex was a meat eating predator and it used these sharp teeth to crunch through bone.



## Stegosaurus

Stegosaurus was a herbivore and used the small cheek teeth it had to eat plant material.

Even millions of years ago, different species of dinosaurs had **specialised teeth** for different tasks, just as animals today do. However, unlike most present-day animals, the teeth of dinosaurs were replaceable. So if a dinosaur lost or broke a tooth, another was grown as a replacement.



## Oviraptor

Oviraptor was thought to be an omnivore. Although the oviraptor had a toothless beak, it had a strong jaw that it used to crush eggs it had stolen from nests.

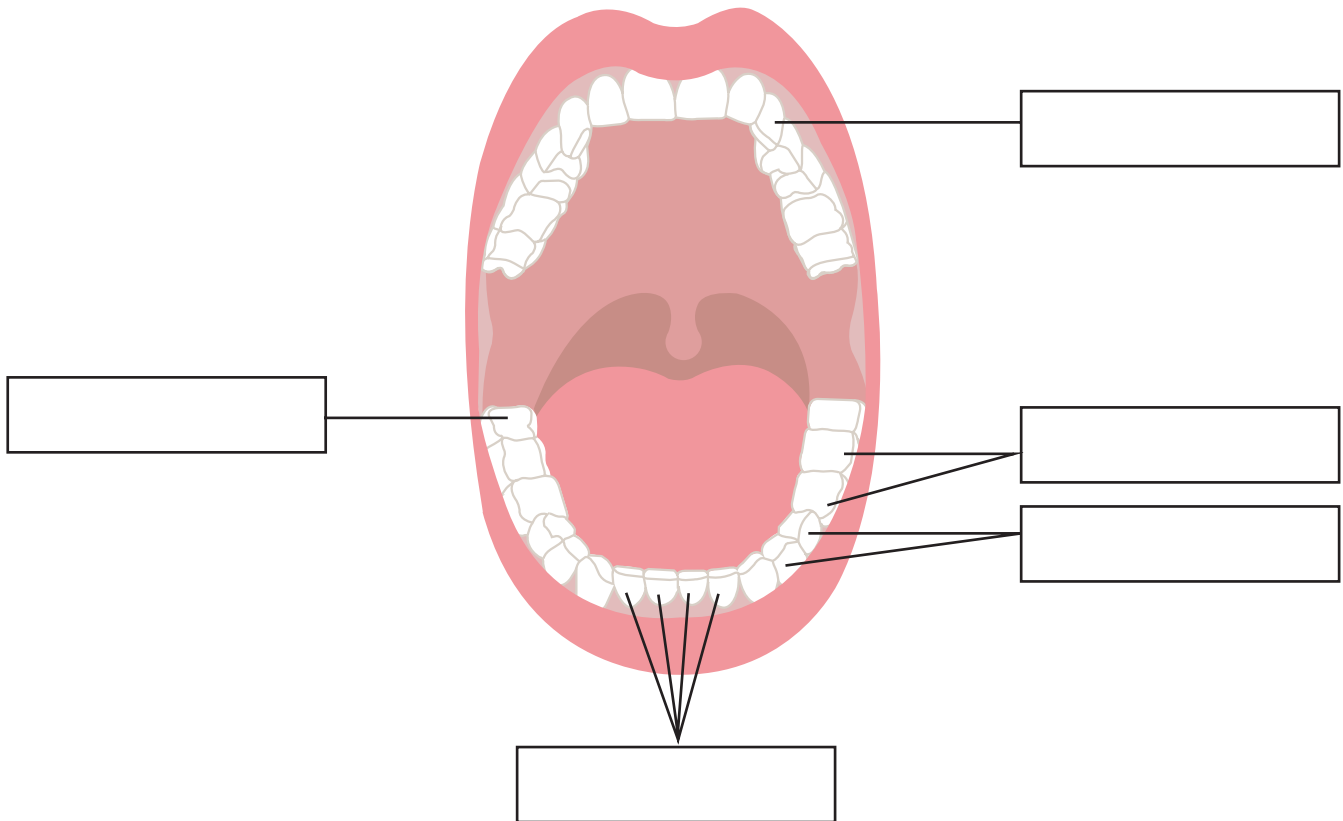
# Have a go!

## What's in your mouth?

Make a copy of the worksheet and complete all the tasks and questions.

Name: \_\_\_\_\_

1. Can you identify the different types of teeth? Fill in the blanks below.



2. What type of teeth are used for chewing and grinding? \_\_\_\_\_

3. What type of teeth are used for biting and cutting? \_\_\_\_\_

4. What type of teeth are used for ripping and tearing? \_\_\_\_\_

5. Have a look in your own mouth. How many teeth do you have? \_\_\_\_\_

6. Name the type of teeth that appear in your late teens? \_\_\_\_\_

7. How many teeth does an adult have? \_\_\_\_\_

8. How many sets of teeth will you have during your life? \_\_\_\_\_

Have a go!

# Who does this belong to?

Make a copy of the worksheet, then have a look at the animals on the front. Can you work out who the skull belongs to?

Choose from: Chimpanzee, Human, Crocodile, Rabbit, Sabre Tooth Tiger, Deer, Tyrannosaurus Rex or Lion.



Name of animal

I though this skull matched this animal because...

Name of animal

I though this skull matched this animal because...

Name of animal

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Name of animal

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Name of animal

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