

# All about Teeth!

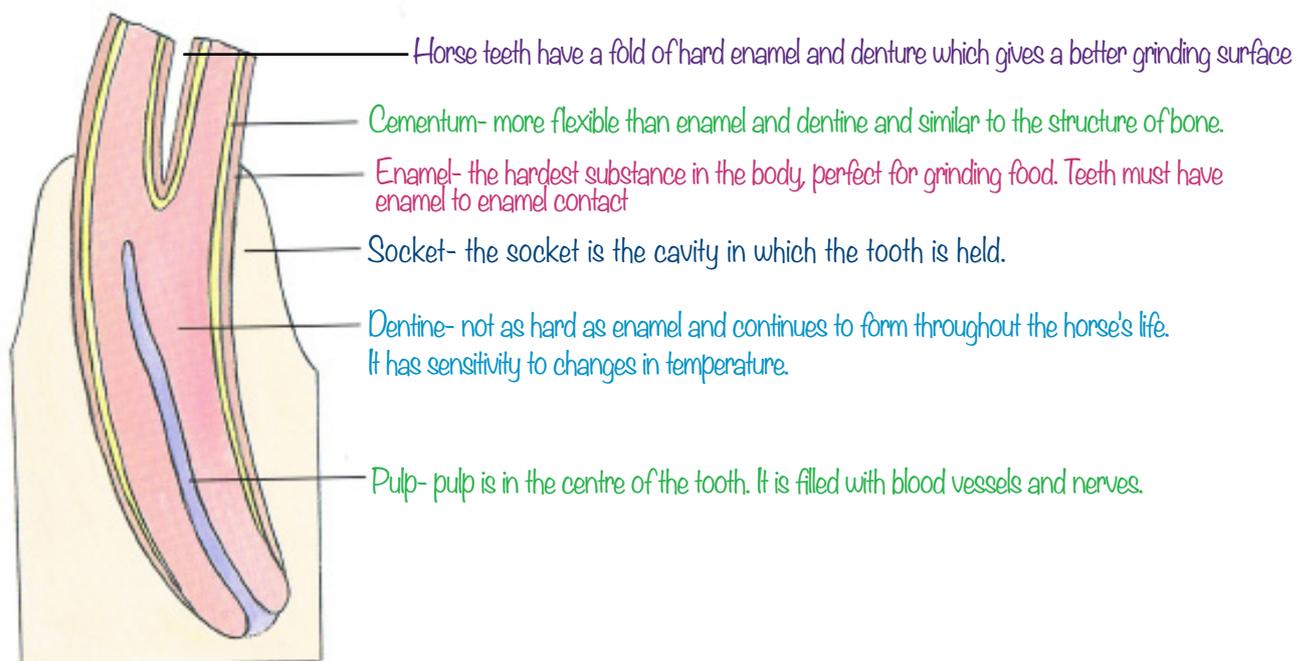
Horses and ponies are born with some 'baby teeth' and by the age of 6 – 8 days old, they have 2 central incisors.



Like your **teeth**, a pony's first set of **teeth** are not permanent and are often referred to as '**baby teeth**', '**milk teeth**' or '**deciduous teeth**'. By the age of 5 years old, a pony's '**baby teeth**' will have fallen out to make way for a full set of **permanent teeth**.

## Did you know?

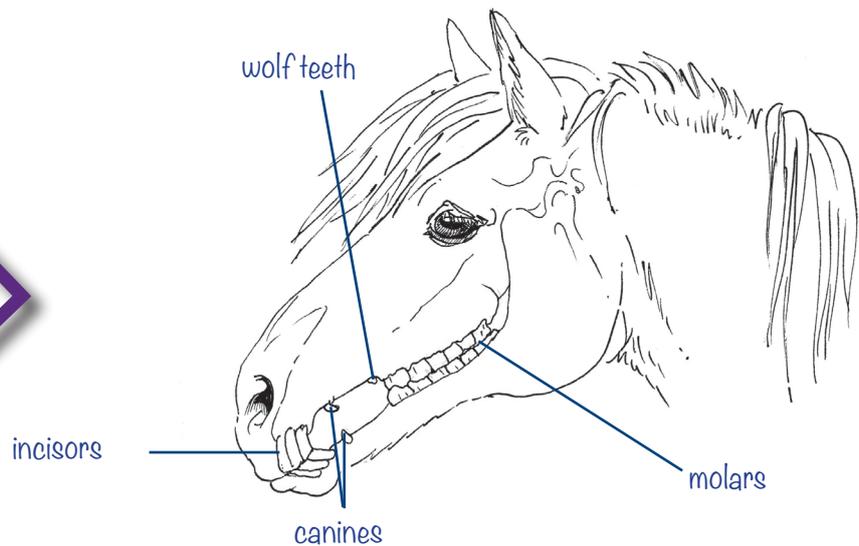
It was the **Chinese** in around **600 b.c.** who first discovered that a horse or pony's **age** could be **determined** by their **teeth**. Have you ever heard the saying 'long in the tooth', referring to someone who is old? **Why not do some research to find out why this might be!**



This is a diagram of a cross-section of a horse's incisor (front tooth). A cross section is a picture of the tooth cut lengthways so that you can see inside it.

The structure of a horse's tooth is the same as the structure of a human's tooth or that of any other mammal. **Why not do some research into this to see if you can find the similarities and differences?**

Like you, a pony's dentition is made up of incisors, molars and sometimes canines and wolf teeth.



A pony's **incisors** are used for **cutting** and **snipping** the food they eat. This is particularly important for ponies because they have to **snip** and **tear grass** and other **plants**. A pony's **molars** **grind** and **break down** their food ready for **digestion**.

**Wolf teeth** are the first **premolars** and are a **vestigial** tooth. '**Vestigial**' means that they became that shape and size through the **evolution** of the species and are not necessarily used by the modern horse. However, they might show what **teeth** the horse needed for their diet **50 million years ago**. Because they can interfere with the bit, **wolf teeth** are sometimes **removed**. Teeth contain **nerve endings** so when these teeth are removed the horse will need to be **sedated** by a vet.

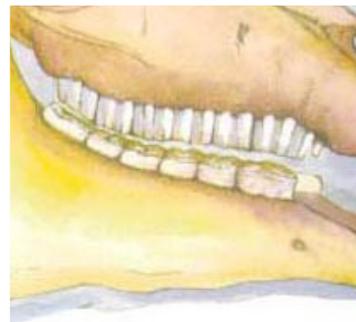
**Canine** teeth are thought to be used in **fighting** between wild horses when establishing **hierarchy** and **dominance**. **Canine** teeth are more prominent in males but can also be found in mares. About 50% of horses have them.

After a pony's **baby teeth** have fallen out, their **roots** are absorbed into the body along with some of the **tooth** structure. What is left is often referred to as a '**cap**'. Maybe it is named this because it looks like a cap on top of the permanent tooth as it pushes through the gum.

Permanent teeth **erupt** (descend) continually from the gum throughout a pony's life at the rate of **2-3 mm** a year. It is important that they **wear down** at the same rate (**2-3 mm a year**) or the pony would end up with very long teeth or **uneven wear** on their teeth and they would find it difficult to close their mouth or chew! Can you imagine how **uncomfortable** this would be?



A pony with un-even wear on molars



A pony with even wear on molars



Animals such as rabbits and guinea pigs also have permanent teeth that keep erupting. That's why it is important that they have a varied diet and things that they can chew. This is something you must consider if you keep them as pets.

Wild or **feral horses** such as **Exmoor Ponies**, **New Forest Ponies** or **Mustangs** in the USA, will travel up to **25 miles** each day in the search for food! A **wild** or **feral** pony's diet will consist of **coarse grasses**, **plants**, **shrubs**, **twigs** and **trees** that they can reach.

You can see this horse is nipping off the branch with his sharp incisors.



This **hard abrasive** diet causes their **teeth** to **wear down** as they **chew** their food so it is essential that their tooth structure is replaced as the teeth **erupt** or the horse would end up with no teeth!

When the **natural diet** is replaced with **hay**, **haylage** and **softer grasses** that are found in **paddocks** and pastures, there is **less** of an **abrasive** action on the teeth as they **grind food** so their teeth may become **sharp** or too **long**. Because of this, a **domesticated** horse or pony can be more at risk of **dental problems** because their teeth are continually **erupting** from the gum but not being worn down at the same rate.

If a **tooth** is lost or has **worn down abnormally**, the opposing tooth would have nothing to **grind** against and can even grow into an empty socket! This causes pain and an **abnormal chewing pattern** which can lead to other problems such as **weight loss**, **tooth infection** or **colic**.

Why not take a look at the **Hedgerow Grazing worksheet** on the '**Nutrition**' page of the **Things to Do area** of the **Club website** to find out what you can feed your pony to help him to **wear down** his teeth naturally. It is important that a **horse dentist** or **vet** cares for a **domesticated** pony's teeth by **rasping** or **fling** them down once or twice a year. This replaces the natural effect that eating **coarse foods** in the **wild** would have on a pony's **teeth**. See the next **dentist worksheet** coming out soon to find out how an **equine dentist** keeps the horse's teeth healthy and functioning.

# Activity 1- Question Time!

Answer the following questions to help you to understand more about your pony's teeth and how you can help to look after them...

1. What could you do to help your pony to wear down his teeth naturally?

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2. What do you think would happen to a horse or pony's teeth if it had a large part of its diet made up of processed food which was not hard to chew and it did not see a dentist?

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3. Name 3 other animals that have teeth that keep erupting:

1.....

2.....

3.....

4. Why is it important for herbivores, such as the horse, to have permanent teeth which continually erupt through their adult life?

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