

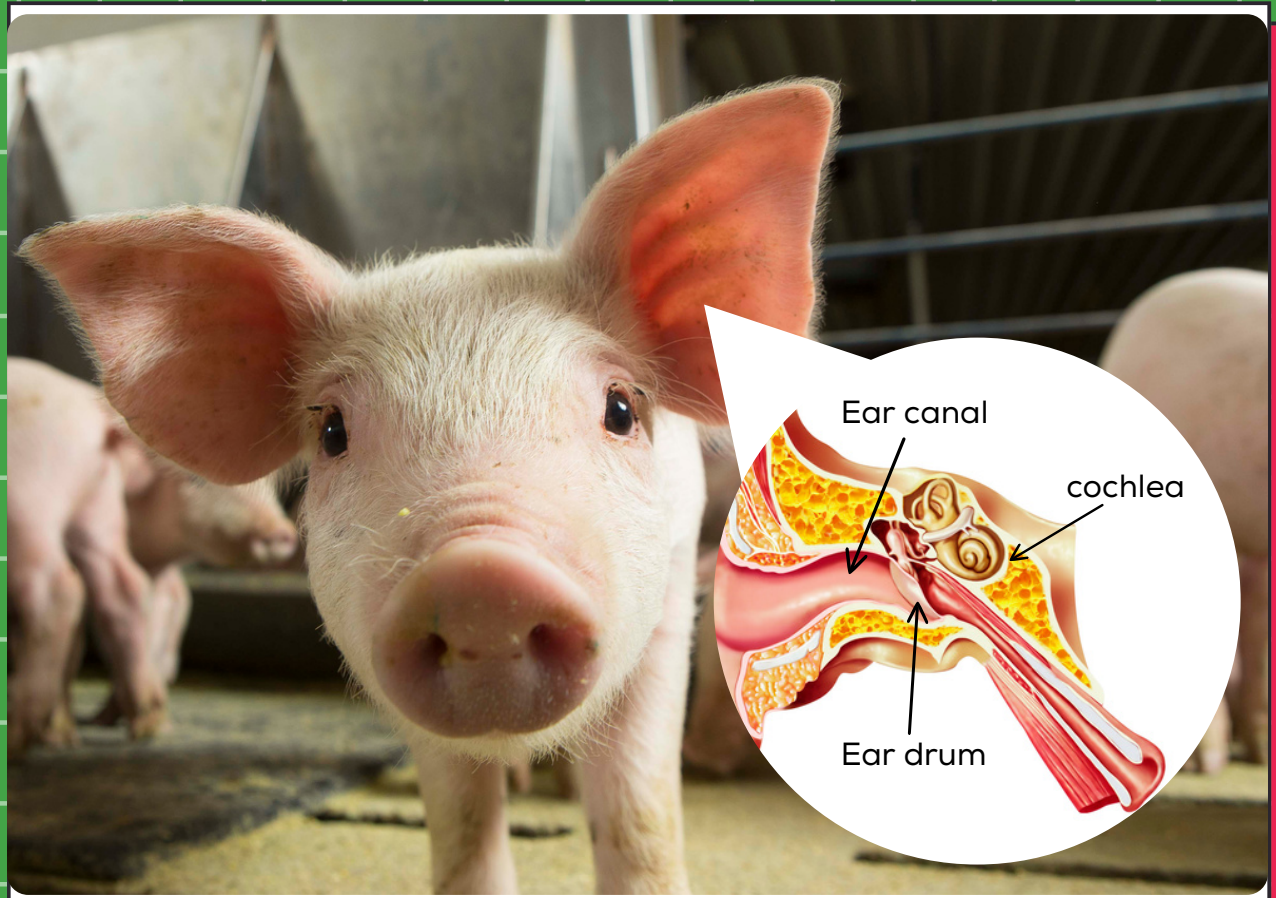
Pig Ears

Let's investigate! Observe the image of the pig structure. What do you notice?

Read about the different ear structures and what they are used for. While reading, think about how the structure is important for growth and survival. How do the ears affect behavior and reproduction?

Pig ears can be different shapes and sizes. When a sound is made, the outside of the ear funnels the sound into the inner ear. The **ear canal** is the first part of the inner ear. The ear canal leads to the ear drum. The **ear drum** vibrates because of **sound waves**. This makes other parts of the inner ear move. At the **cochlea** (co-klee-uh), the sound waves move tiny hairs in fluid. The hairs move based on the speed of the sound wave. The pig's brain decodes the message. This helps a piglet know where its mother is, or a lost piglet know where its group is.

Farmers will **notch** a pig's ears. Notching helps the farmer tell pigs apart. Being able to tell pigs apart helps the farmer keep records. Farmers keep records of many things, including pig traits. Knowing a pig's traits can help the farmer breed their pigs.



Pig Jowl

Let's investigate! Observe the image of the pig structure. What do you notice?

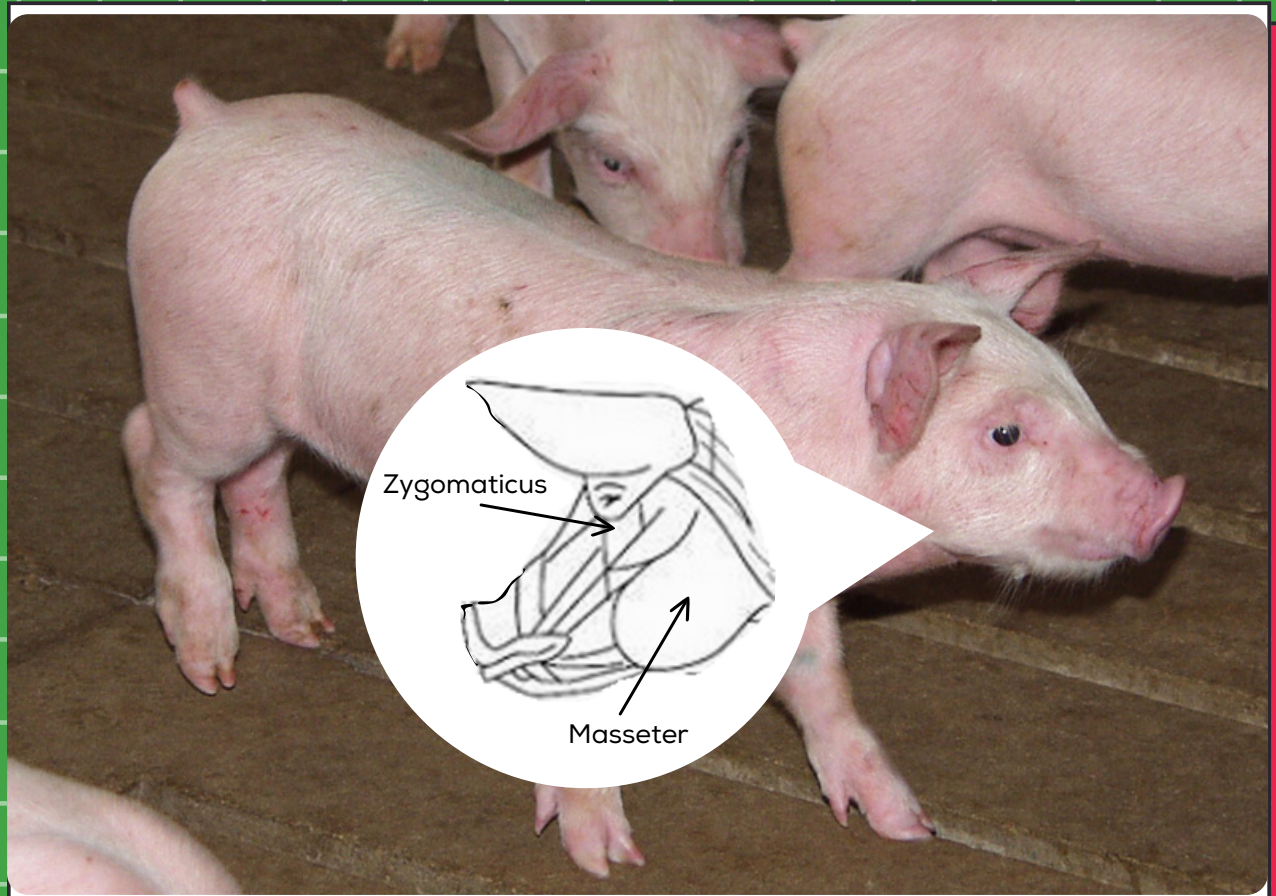
Read about the different jowl structures and what they are used for. While reading, think about how the structure is important for growth and survival. How does the jowl affect behavior and reproduction?

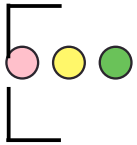
The pig's **jowl** is located under the snout. The jowl is also known as the chin.

Muscles are internal structures that help move bones. One muscle in the jowl is the masseter. Another muscle is the zygomaticus. The **masseter** (mas-set-er) and **zygomaticus** (zy-go-mat-i-cus) help to move the pig's mouth when it chews.

Pigs are **omnivores** (om-nee-vore), they eat meat and plants. Farmers feed their pigs a ration of corn, soybeans, vitamins, and minerals. Being able to chew their food gives pigs the ability to gather matter. Matter is transformed into energy in the pig's body.

When piglets are born in the wild, the **sow** (female pig) will use her mouth to clean the piglets. Cleaning the piglets helps them dry. Being dry protects the piglets from getting chilled. On a pig farm, farmers help to dry the piglets.





Pig Pastern

Let's investigate! Observe the image of the pig structure. What do you notice?

Read about the different pastern structures and what they are used for. While reading, think about how the structure is important for growth and survival. How does the pastern affect behavior and reproduction?

The **pastern** is located just below the dewclaws and above the pig's hooves. Bones make up the **skeletal system**. The skeletal system has muscles that attach to it. The muscles move the bones to help the pig move. The pastern's internal bones provide the pig support.

The bones in the pastern are called **phalanges** (fa-lan-gees). Having strong bones helps the pig support itself as it grows and puts on weight. It also helps to support the pig as it moves over different terrain.

In modern agriculture, many pigs are raised in hog barns. Hog barns have cement floors with slats. Strong bones help pigs avoid injury when standing or walking on harder surfaces, like cement.



Pig Ham

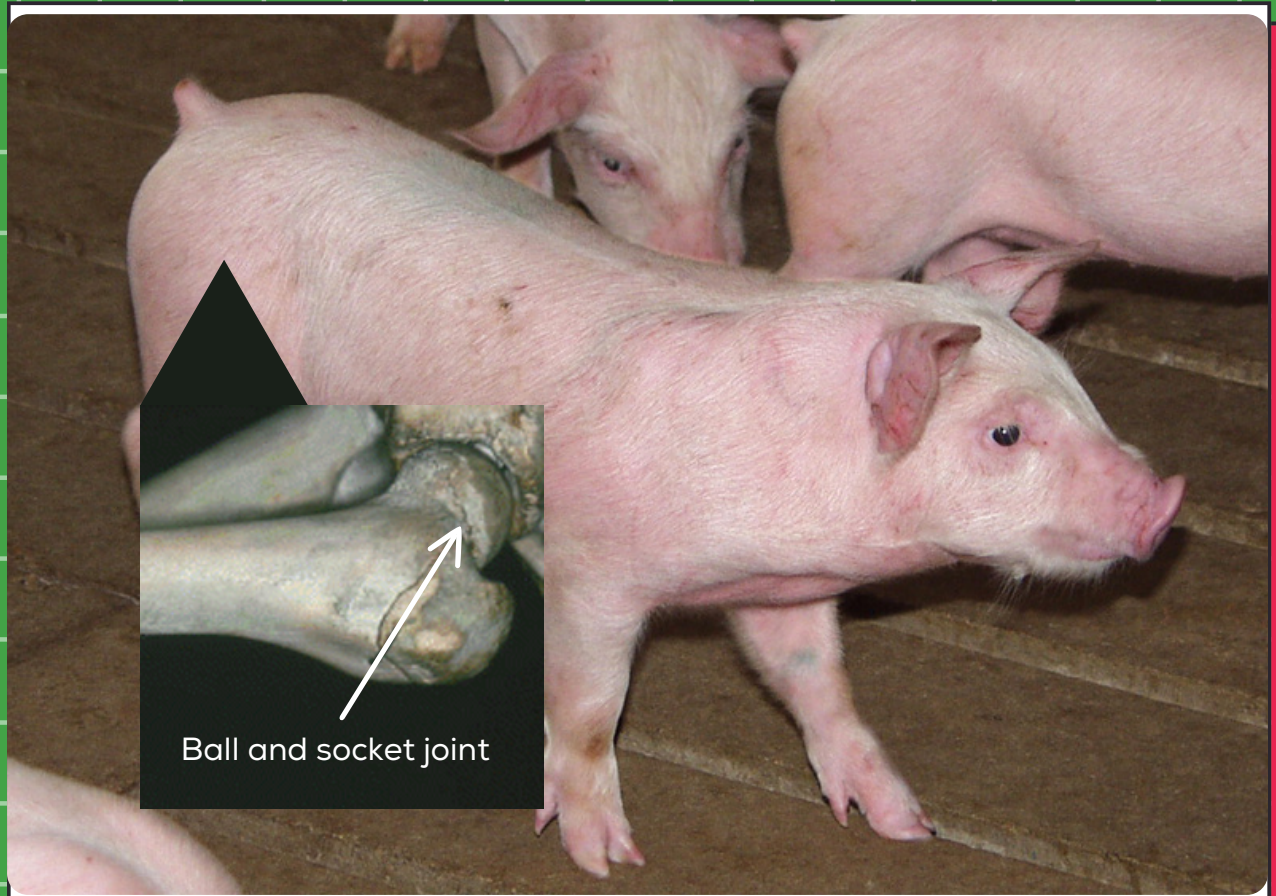
Let's investigate! Observe the image of the pig structure. What do you notice?

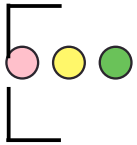
Read about the different ball and socket joint structures and what they are used for. While reading, think about how the structure is important for growth and survival. How does the ball and socket joint affect behavior and reproduction?

The ham is a cut of meat. The ham is made up of muscle. One muscle is the **biceps femoris**, a leg muscle. **Muscles** are internal structures that help move bones in the skeletal system.

When two different bones meet, they create a **joint**. There are five common joints called pivot, hinge, sliding, and ball and socket. Joints are found in pigs, humans, and other animals.

The **ball and socket joint** has a large range of movement. A ball and socket joint has a bone with a rounded end that fits into the end of another bone that has a divot. This joint allows the pig to walk or run with ease. Moving with ease helps the pig strengthen their muscles and support their bodies as they grow.





Pig Snout

Let's investigate! Observe the image of the pig structure. What do you notice?

Read about the different ham structures and what they are used for. While reading, think about how the structure is important for growth and survival. How does the ham affect behavior and reproduction?

The **snout** helps the pig smell. Smell helps the pig gather information about the world. The length of the snout varies from breed to breed. The snout has two openings called **nostrils**. The nostrils help air move in and out of the pig. Pigs breathe in oxygen and breathe out carbon dioxide.

Air contains **particles**, like dust. The snout has tiny hairs to filter out particles. Some particles are too small for the hairs to stop. Scent particles are captured by **receptors** in the pig's snout. Receptors trap scent particles. The scent particles trigger the pig's brain and memory. Remembering certain scents helps the pig find food, litter mates, and detect danger.

The snout helps the pig to move dirt and other items, much like humans using their hands. Scent also helps a male know when a female is in heat, or ready to mate.

