



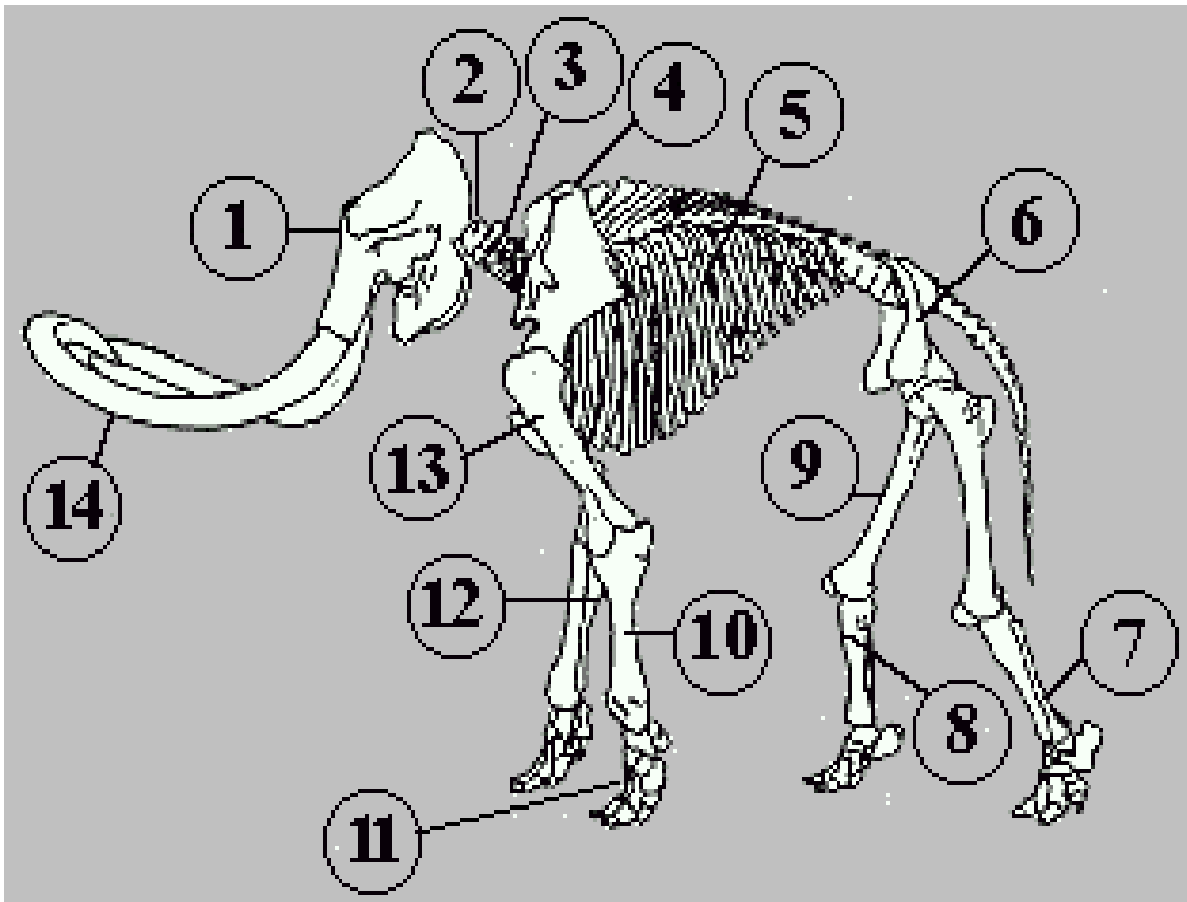
The Mammoth Skeleton

Below you see a list of words and a woolly mammoth skeleton. Match the words to the circled numbers using the clues on the following pages.

- ___ Pelvis
- ___ Femur
- ___ Tusk
- ___ Radius
- ___ Skull

- ___ Tibia
- ___ Atlas
- ___ Ulna
- ___ Ribs
- ___ Metacarpals

- ___ Fibula
- ___ Vertebrae
- ___ Humerus
- ___ Scapula



Clues to: *The Mammoth Skeleton*

The **atlas** is the first cervical **vertebra** and supports the base of the **skull**. Large muscles surround the **atlas** and contribute to the enormous size of the mammoth **skull**. Some scientists believe that the muscles around the **atlas** help counter the weight of the **tusks** and balance the mammoth. Its name comes from the mythical Greek god Atlas, who held up the world in his arms.

The **femur** is the largest bone in the hind legs, connected to the **tibia** and **fibula** giving the main support for the entire back of the mammoth. The **femur** is similar to the **humerus**, except that it is found in the rear legs.

The **fibula** is located just behind the **tibia** also helping support and allow movement of the rear legs.

The **humerus** is the large bone that is connected to the **radius** and **ulna** in the front legs of the mammoth. Much like the **femur** in the back legs, the **humerus** gives support and structure for the front legs.

The **metacarpals and metatarsals** form the palm of the hands and insole and ball of the feet. In mammoths, they are placed differently, being supported on a large pad at the base of the mammoth foot. To us, the mammoth skeleton appears to be walking on the tips of its toes.

The **pelvis** is the lower body central support structure. As the **scapula** have sockets for the **humerus**, the **pelvis** has sockets for the balls of the **femur**.

The **radius** acts as the front shin of the mammoth and supports the front legs. It is attached to the **humerus** and lies right in front of the **ulna**.

The **ribs** develop in pairs along the **vertebrae** and help strengthen the body. Additionally, muscles are attached to the **ribs** to further stabilize the body and provide protection to the large organs just inside the ribcage.

The **scapula** is commonly called the shoulder blade. The **scapula** has a socket that fits with the ball of the **humerus**.

The **skull** of the mammoth is very similar to that of the modern day elephants. It houses the brain, eyes, teeth and **tusks**.

The **tibia**, or shin bone, is located below the **femur** in front of the **fibula**. It acts to support the massive weight of the mammoth and provide the action for movement in the lower leg.

Mammoth **tusks** are actually teeth that extended from the mouth. **Tusks** were used by the mammoth to dig and root for food, especially in the winter to get through the snow and ice. They were also used as a defense against predators and other mammoths. **Tusks** help researchers identify the age of the animal at the time of its death. Just like a tree, a cross section of a **tusk** reveals growth rings that directly correlate with the animal's age.

The **ulna** lies directly behind the **radius** in the front legs and is connected to the **humerus**. Its main function, like the **radius**, is to help with motion and support the large mammoth.

A series of **vertebrae** make up the **vertebral** column, or spine. The **vertebral** column provided the mammoth with support while it was standing. Additionally, the **vertebral** column provided support and flexibility during periods of movement. **Vertebrae** also have hollow openings that house the spinal cord.