The Equine Skeleton

The horse has 205 bones making up their skeleton. The skeleton can be put into two main categories the Axial Skeleton and the Appendicular Skeleton.

- The Appendicular Skeleton regards the limbs in which each limb has 20 bones that make it up.
- The Axial Skeleton regards to the framework which consists of 125 bones, starting at the skull and moving along the vertebrae to where the ribs attach then on to the pelvis.

Function Of Bones

- Bones protect the internal organs of the heart for example the skull protects the brain.
- Bones give the horse a framework upon which muscles, tendons and ligaments can attach.
- Bones allow the horse movement along with the muscles, tendons and ligaments.
- It is within the Bone Marrow that Red Blood cells are produced.
- It is within the bones that minerals are stored for example the minerals Calcium and Phosphorous.

Types of Bones

The equine skeleton is made up of a combination of Flat bones, Long bones, Short bones, Irregular bones and Sesamoid bones.

Flat Bones
These have a broad flat surface onto which muscles can attach for example the bones in the head.

Long Bones
These are quite literally bones which are long, contain marrow and that have two joint surfaces at either end, these joint surfaces are called epiphyses. An example of a long bone would be the cannon bone in the lower limb.
**Short Bones**
These are bones which are short in length for example the Carpal Bones.

**Irregular Bones**
These are irregular in size and shape and an example would be the bones that make up the vertebrae.

**Sesamoid Bones**
These act in conjunction with the tendons and prevent the tendon from making contact with the bone for example the Navicular bone works with the Deep Digital Flexor Tendon.

**The Bones**

There are approximately 205 bones making up the equine skeleton.

**Vertebrae**
There are approximately 51 to 56 in total.

- 7 cervical vertebrae Atlas and Axis are at the top.
- 18 Thoracic
- 6 Lumbar.
- 5 Sacral
- 15 to 20 Coccygeal

**1 Sternum Bone.**

**Forelimb** contains 20 bones in each limb.

- 1 Scapular
- 1 Humorous
- 1 Ulna this is fused with the Radius.
- 1 Radius this is fused with the Ulna.
- Carpal bones there are 7 in each knee
- 1 Cannon bones
- 2 Splint Bones
- 1 Long pastern (1st Phalanx)
- 1 Short pastern (2nd Phalanx)
- 1 Pedal Bones (3rd Phalanx)
- 2 Sesamoid bones
- 1 Navicular bone.

**Hindlimb** contains 20 bones in each limb.

- 1 Sarcum
- 1 Pelvis (Ileum, Isheum, Pubis)
- 1 Tibia
- 1 Fibula
- 7 Tarsus bones of the hock
- 1 Cannon bone.
- 2 Splint bones
- 1 Long pastern (1st Phalanx)
- 1 Short Pastern (2nd Phalanx)
- 1 Pedal bone (3rd Phalanx)
- 2 Sesamoid bones.
- 1 Navicular bone.

**Skull** contains 37 bones.

**Ribs** 36 in total (Arab horses often have 37 ribs).