

The skeletal system is divided into two distinct divisions: the axial skeleton and the appendicular system.

Learning Objective

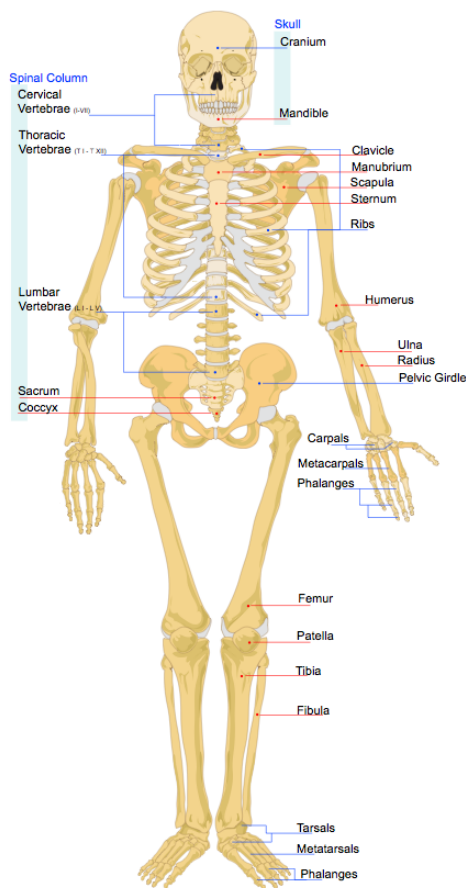
- Differentiate the purpose and the number of bones of the axial and appendicular skeletons
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Key Points

- The skeletal system serves many important functions. It provides the shape and form for our bodies. It also supports and protects while allowing bodily movement, producing blood for the body, and storing minerals.
 - The axial skeleton is formed by the vertebral column, the rib cage (12 pairs of ribs and the sternum), and the skull.
 - The appendicular skeleton is formed by the pectoral girdles, the upper limbs, the pelvic girdle, and the lower limbs.
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Terms

- Skeletal System
- The skeletal system is composed of 206 bones which form a longitudinal axis, the axial skeleton, to which the appendicular skeleton is attached.
- appendicular skeleton
- The appendicular skeleton is composed of 126 bones in the human body involved in locomotion (lower limbs) of the axial skeleton and manipulation of objects in the environment (upper limbs).
- axial skeleton
- The axial skeleton consists of the 80 bones along the central axis of the human body.

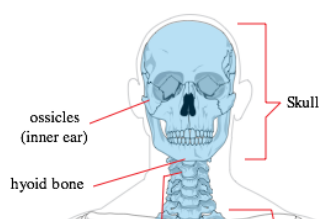


The **skeletal system** serves many important functions. It provides the shape and form for our bodies in addition to support and protection. It also allows bodily movement, produces blood for the body, and stores minerals. The number of bones in the human skeletal system is a controversial topic. Humans are born with between 300 and 350 bones. However, many bones fuse together between birth and maturity. As a result, an average adult skeleton consists of 206 bones . The number of bones varies according to the method used to derive the count. While some consider certain structures to be a single bone with

multiple parts, others may see it as a single part with multiple bones. There are five general classifications of bones. These are long bones, short bones, flat bones, irregular bones, and sesamoid bones. The human skeleton is composed of both fused and individual bones supported by ligaments, tendons, muscles, and cartilage. It is a complex structure with two distinct divisions: the **axial** and the **appendicular** skeletons.

The Human Skeletal System.

The axial skeleton consists of the 80 bones along the central axis of the human body. It is composed of the human skull, the ossicles of the middle ear, the hyoid bone of the throat, the rib cage, and the vertebral column .



Axial Skeleton

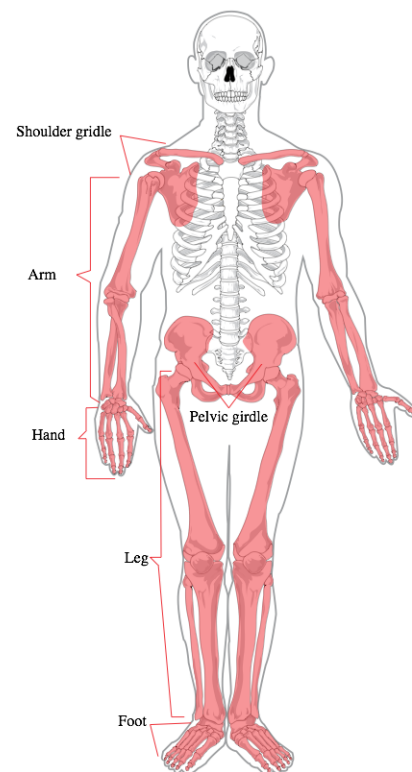
The **axial skeleton** is shown in blue.

The **appendicular** skeleton is composed of 126 bones in the human body. The word "**appendicular**" is the adjective of the noun appendage, which itself means a part that is joined to something larger. Functionally, it is involved in locomotion (lower limbs and pelvic girdle) of the axial skeleton and manipulation of objects in the environment (upper limbs and pectoral girdle) .

Appendicular Skeleton

The appendicular skeleton is shown in red.

Source: Boundless. "Axial and Appendicular." *Boundless Anatomy and Physiology*. Boundless, 14 Nov. 2014. Retrieved 03 Dec. 2014 from



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