

# What is the Skeletal System?

## Worksheet

The skeletal system is the organ system made of bones, cartilage, ligaments, and joints that supports the body, protects internal organs, enables movement by anchoring muscles, stores minerals, and produces blood cells in bone marrow.

## Questions

1. How many bones does the average adult skeleton have?

- A) 186
- B) 206
- C) 226
- D) 256

2. Which skeleton division includes the skull and rib cage?

- A) Appendicular
- B) Axial
- C) Peripheral
- D) Cranial

3. What structure connects bone to bone?

- A) Tendon
- B) Ligament
- C) Cartilage disc
- D) Periosteum

4. Which of these is NOT a main function of the skeletal system?

- A) Protection
- B) Movement
- C) Digestion
- D) Mineral storage

5. Classify the femur, skull, and clavicle into the axial or appendicular skeleton.

6. Explain how the skeletal system enables movement even though bones themselves cannot contract.

7. A patient has low blood calcium. How does the skeletal system help restore normal levels?

8. Define: How many bones are in the adult human skeleton?

9. Define: What are the two main divisions of the skeleton?

10. Define: Name the five main functions of the skeletal system.

## Answer Key

1. B) 206 - The adult human skeleton has 206 bones (infants have more, which fuse over time).
2. B) Axial - The axial skeleton forms the body's central axis, including the skull, spine, and rib cage.
3. B) Ligament - Ligaments connect bones to each other across joints.
4. C) Digestion - Digestion is handled by the digestive system, not the skeletal system.
5. The skull is part of the axial skeleton - it forms the body's central axis and protects the brain The femur is part of the appendicular skeleton - it is a limb bone used for locomotion The clavicle is also appendicular - it's part of the shoulder girdle connecting the arm to the axial skeleton So of the three, only the skull belongs to the axial skeleton
6. Bones act as rigid levers that don't generate force on their own Skeletal muscles attach to bones via tendons across joints When a muscle contracts, it pulls on the bone it's attached to, rotating it around a joint The skeleton provides the fixed points and levers that turn muscle contraction into limb movement
7. Parathyroid hormone rises in response to low blood calcium This activates osteoclasts, cells that break down bone matrix Breaking down bone releases stored calcium and phosphate into the bloodstream Once blood calcium normalizes, osteoblast activity resumes to rebuild the bone that was broken down
8. 206 bones.
9. The axial skeleton (skull, spine, rib cage) and the appendicular skeleton (limbs and girdles).
10. Support, protection, movement, mineral storage, and blood cell production (hematopoiesis).

### **Bounlu**

All cards, step-by-step solutions and an AI tutor are in the Notek app.  
Promy turns exam dates into automatic reminders.