

1. How are the below cells involved in bone formation and remodeling?
 - a. osteoblast –
 - b. osteoclast –
 - c. fibroblast –
2. List three functions of the skeletal system.
3. List the functions of the below hormones. Would the below hormones bring about bone reabsorption or deposition (ossification)?
 - a. calcitriol –
 - b. parathyroid hormone –
 - c. calcitonin -
4. What substances make up the below bone components. What are the functions of each component?
 - a. organic portion –
 - b. inorganic portion -
5. What is the function of the below structures?
 - a. periosteum –
 - b. articular cartilage –
 - c. medullary cavity –
 - d. stress lines –
 - e. spongy bone –
6. Would the below activities increase or decrease bone mass? Write I or D.
 - a. Being weightless for an extended period of time.
 - b. Wearing a cast for six months.
 - c. Starting a weight lifting program.
 - d. Running.
7. List five hormones involved in bone growth.
8. Bone reabsorption involves **osteoclasts/osteoblasts** and is stimulated by **parathyroid hormone/calcitonin**. Bone deposition involves **osteoblasts/osteoclasts** and is stimulated by **parathyroid hormone/calcitonin**.
9. Longitudinal growth takes place at the **epiphyseal plate/periosteum**. Diametrical bone growth takes place at the **epiphyseal plate/periosteum**.

10. Hemopoiesis takes place in the **yellow/red** bone marrow. The type of ossification that takes place in the femur is **endochondral/intramembranous** ossification.

11. A **compound/simple** fracture involves a bone protruding through the skin. A **Pott's/Colles'** fracture involves a break at the distal end of the radius. A fracture that commonly occurs in children where one side of a bone breaks and the other side bends is called a **comminuted/greenstick** fracture.

Bonus. Describe in as much detail osteoporosis. What is it? Who is at risk? How can it be avoided?