

Chapter 6, 7 & 8 • Bones and the Skeletal System

Reading

- Chapter 6, pay attention to the functions of the various cells.
- Chapter 7, pay attention to the bone landmarks.
- Chapter 8, pay attention to the bone landmarks.

Objectives

1. Describe the six main functions of the skeletal system.
2. Identify bones on the basis of shape and location.
3. Describe the parts of a long bone.
4. Describe the principal surface markings on bones and the functions of each.
5. Compare the properties of compact and spongy bone tissue.
6. Explain why bone tissue is classified as a connective tissue.
7. Describe the cellular components of bone tissue and the functions of each component.
8. Outline the structural and functional differences between compact and spongy bone tissue.
9. Describe the histological features of bone tissue.
10. Describe the blood and nerve supply of bone.
11. Describe the process and purpose of bone remodeling.
12. Distinguish between intramembranous ossification and endochondral ossification.*
13. Explain the importance of the different types of bone formation during different phases of a person's lifetime.
14. Describe the process of bone remodeling.
15. Describe the process of fracture repair.
16. Describe how exercise and mechanical stress affect bone tissue.
17. Explain why exercise, vitamins, and hormones are important to bone growth.
18. Describe how the skeleton is organized into axial and appendicular skeletons.**
19. Name the cranial bones and facial bones and indicate the number of each.**
20. Describe the following major features of the skull: sutures and parietal foramen.
21. Identify the location and surface features of the frontal bone.*
22. Identify the location and surface features of the parietal bones.
23. Identify the location and surface features of the temporal bones.
24. Identify the location and surface features of the occipital bone.
25. Identify the location and surface features of the sphenoid bone.
26. Identify the location and surface features of the ethmoid bone.
27. Identify the location of the nasal, lacrimal, and palatine bones, indicate nasal conchae and meatus.
28. Identify the location and surface features of the maxilla and mandible bones.
29. Identify the location and surface features of the hyoid bone.
30. Describe the relationship of the hyoid bone to the skull and explain its function.
31. Identify the regions and anatomical sites of the vertebral column.
32. Identify the location and surface features of the cervical vertebrae.
33. Identify the location and surface features of the thoracic vertebrae.
34. Identify the location and surface features of the lumbar vertebrae.
35. Identify the location and surface features of the sacral and coccygeal vertebrae.
36. Identify the bones of the thorax and their functions.
37. Identify the location and surface features of the sternum.
38. Identify the location and surface features of the ribs.
39. Identify the bones of the skeleton of the upper limb and explain their functions.*
40. Describe the location and surface features of the clavicle.
41. Describe the location and surface features of the scapula.
42. Identify the location and surface landmarks of the humerus.