CHAPTER 5 WORKSHEET & READING GUIDE – THE SKELETAL SYSTEM

1. What are the 6 functions of the skeletal system?

2. What are the differences between compact bone and spongy bone?

3. Draw the structure of an osteon, include the locations of osteocytes, central canal, blood vessels, nerves, calcium, and phosphorous.

3. What molecule(s) give bone its flexible characteristics?

4. What molecule(s) give bone its hard characteristics?

5. Describe the relationship between osteocytes, osteoblasts, and osteoclasts in bone remodeling and homeostasis.

6. How is bone homeostasis disrupted in Rickett’s and osteoporosis?

7. Describe how bone forms during embryonic development and during fracture healing (the cartilage model).

8. What is the hormone that stimulates growth in children? What do advertisements claim that human growth hormone does in adults?

9. What is the axial skeleton?

10. What is the appendicular skeleton?
11. Identify the locations of the
   • Femur
   • Tibia
   • Fibula
   • Patella
   • Humerus
   • Radius
   • Ulna

12. What are joints?

13. What are the main categories of joints and an example of each category?

14. What do ligaments do?

15. What are some common joint injuries?

16. What is arthritis and what causes it?

17. Describe each of these joint movements:
   • Flexion
   • Extension
   • Adduction
   • Abduction
   • Rotation
   • Circumduction
   • Supination
   • pronation