

**SECTION 45-2 REVIEW**

**SKELETAL SYSTEM**

**VOCABULARY REVIEW** Explain the relationship between the terms in each of the following pairs of terms.

1. axial skeleton, appendicular skeleton \_\_\_\_\_  
\_\_\_\_\_
2. periosteum, compact bone \_\_\_\_\_  
\_\_\_\_\_
3. bone marrow, spongy bone \_\_\_\_\_  
\_\_\_\_\_
4. ossification, epiphyseal plate \_\_\_\_\_  
\_\_\_\_\_
5. joint, ligament \_\_\_\_\_  
\_\_\_\_\_

**MULTIPLE CHOICE** Write the correct letter in the blank.

- \_\_\_\_\_ 1. The process in which bone cells gradually replace cartilage is called
 

a. ossification.	c. restoration.
b. osteoarthritis.	d. None of the above
  
- \_\_\_\_\_ 2. The axial skeleton includes bones of the
 

a. arms.	b. legs.	c. ribs.	d. All of the above
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- \_\_\_\_\_ 3. Semimovable joints are found
 

a. in the knees.	c. in the thumbs.
b. between vertebrae.	d. in the elbows.
  
- \_\_\_\_\_ 4. Tough bands of connective tissue that hold bones in place are called
 

a. ligaments.	b. tendons.	c. gliding joints.	d. muscles.
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- \_\_\_\_\_ 5. Osteoarthritis is characterized by
 

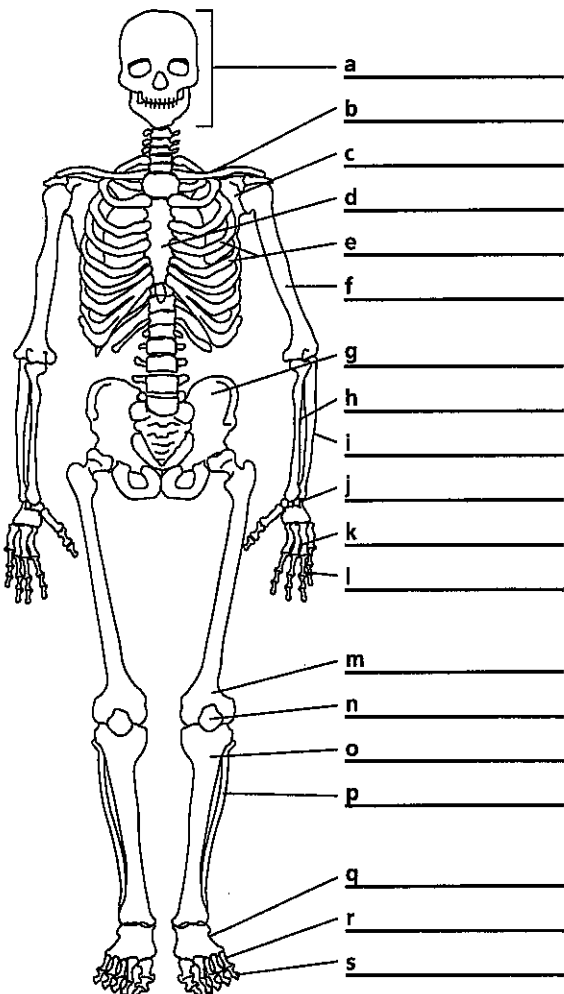
a. stretching of ligaments.	c. fracturing of bones.
b. autoimmunity.	d. thinning of cartilage.

**SHORT ANSWER** Answer the questions in the space provided.

1. Describe three functions of bones. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
2. List three types of joints, and give an example of each type. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
3. Describe the importance of bone marrow. \_\_\_\_\_  
 \_\_\_\_\_
4. **Critical Thinking** Why is dietary calcium important to bone growth and maintenance?  
 \_\_\_\_\_  
 \_\_\_\_\_

**STRUCTURES AND FUNCTIONS** Use the figure of the human skeleton at right to answer the following questions.

1. Label each part of the figure in the spaces provided.
2. What are the primary functions of the skeleton? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
3. How do bones elongate? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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**SECTION 45-3 REVIEW**

**MUSCULAR SYSTEM**

**VOCABULARY REVIEW** Distinguish between the terms in each of the following pairs of terms.

1. voluntary muscle, involuntary muscle \_\_\_\_\_  
\_\_\_\_\_
2. origin, insertion \_\_\_\_\_  
\_\_\_\_\_
3. flexor, extensor \_\_\_\_\_  
\_\_\_\_\_
4. actin, myosin \_\_\_\_\_  
\_\_\_\_\_
5. muscle fatigue, oxygen debt \_\_\_\_\_  
\_\_\_\_\_

**MULTIPLE CHOICE** Write the correct letter in the blank.

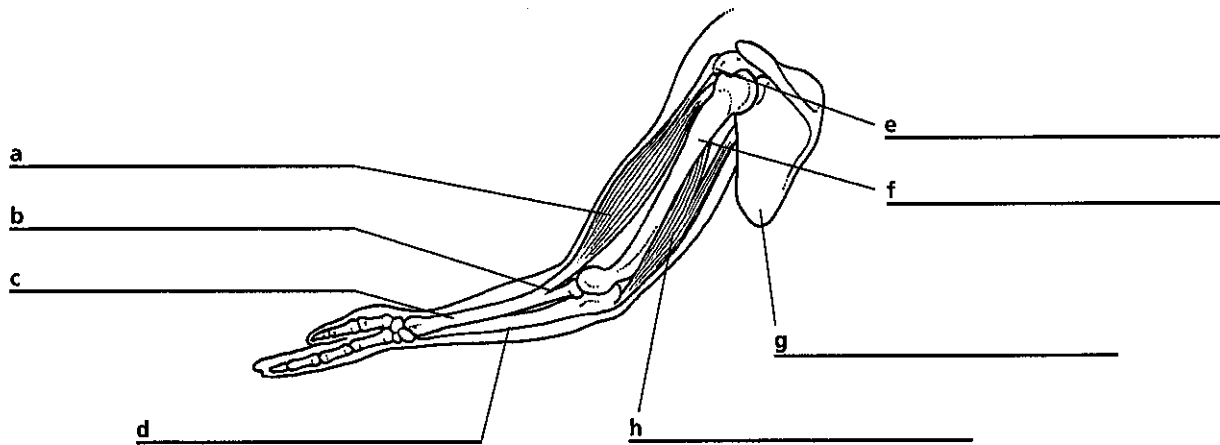
- \_\_\_\_\_ 1. Which of the following types of muscle tissues is found in the walls of the stomach, intestines, and blood vessels?  
 a. cardiac muscle    b. smooth muscle    c. skeletal muscle    d. voluntary muscle
- \_\_\_\_\_ 2. Which of the following types of muscle tissues is responsible for moving most parts of the body?  
 a. cardiac muscle    b. smooth muscle    c. skeletal muscle    d. involuntary muscle
- \_\_\_\_\_ 3. A sarcomere  
 a. is the functional unit of muscle contraction.    c. uses ATP.  
 b. consists of myofibrils.    d. All of the above
- \_\_\_\_\_ 4. Muscles that cause a joint to bend are called  
 a. flexors.    b. origins.    c. extensors.    d. insertions.
- \_\_\_\_\_ 5. Which of the following happens when a skeletal muscle contracts?  
 a. Sarcomeres shorten.    c. Myosin heads attach to actin filaments.  
 b. Myosin heads bend outward.    d. All of the above

**SHORT ANSWER** Answer the questions in the space provided.

1. How does a runner acquire an oxygen debt? \_\_\_\_\_  
\_\_\_\_\_
2. How does a muscle contract? \_\_\_\_\_  
\_\_\_\_\_
3. Distinguish between the three types of muscle tissue. \_\_\_\_\_  
\_\_\_\_\_
4. **Critical Thinking** Why are flexors and extensors considered antagonistic muscles?  
\_\_\_\_\_

**STRUCTURES AND FUNCTIONS** Use the figure of the human arm below to answer the following questions.

1. Label each part of the figure in the spaces provided.



2. Which muscle is a flexor and which muscle is an extensor? \_\_\_\_\_
3. Where is the insertion of *a* located? Where is the origin of *a* located? \_\_\_\_\_

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