Anatomy and Physiology Chapters 6-9 Skeletal System Study Guide

1. A bone with a long longitudinal axis and expanded ends is classified as a _____bone.
2. Ribs are examples of_____bones.
3. The shaft of a long bone is the: a. epiphysis, b. diaphysis
4. Bone that consists of tightly packed tissue is called_____bone.
5. Bone that consists of numerous bony bars and plates separated by irregular spaces is called_____bone.
6. The medullary cavity is filled with: a. spongy bone, b. fatty connective tissue, c. marrow, d. collagen
7. Osteoclasts and osteoblasts remodel bone througout life as osteoclasts resorb bone tissue and osteoblasts replace the bone. **True/False**
8. The effect of exercise on bones is to cause them to_____, and lack of exercise causes them to_____.
9. To accomplish movement, bones and muscles, function together to act as _____.
10. The usual number of bones in the human skeleton is_____.
11. List the four major parts of the axial skeleton.

12. List the four major parts of the appendicular skeleton.

13. The only movable bone of the skull is the _____
14. The bone that forms the back of the skull and joins the skull along the lambdoidal suture is the_____bone.
15. A type of vertebral crack or break experienced by such athletes as gymnasts and pole vaulters is a_____.
16. The function of the thoracic cage includes: a. production of blood cells, b. contribution to breathing, c. protection of heart and lungs,d. support of the shoulder girdle
17. True ribs articulate with_____ _____and the_____.
18. The middle body of the sternum is the: a. manubrium, b. tubercle, c. xiphoid, d. body
19. The pectoral girdle is made up of 2_____and 2_____.
20. What is commonly referred to as the elbow is actually: a. the surgical neck of the humerus, b. the olecranon process of the ulna, c. the radial tuberosity, d. the styloid process
21. The wrist consists of: a. 8 carpal bones, b. 5 metacarpal bones, c. 14 phalanges,d. distal segments of the radius and the ulna
22. The bones of the palm of the hand are the_____bones.
23. When the hands are placed on the hips, they are placed over the _____.
24. The longest bone in the body is the: a. tibia, b. fibula, c. femur, d. patella
25. The largest of the tarsal bones is the_____.

Part I: Structure and Classification of Bone

1. The bones of the wrist are examples of_____bones.
2. The bone of the thigh is an example of a(n)_____bone.
3. Vertebrae are examples of_____bones.
4. The patella (kneecap) is an example of a _____bone.
5. The bones of the skull that form a protective covering of the brain are examples of_____bones.
6. Distinguish between the epiphysis and the diaphysis of a long bone.

7. Describe where cartilage is found on a long bone.

8. What are the differences between the structure of compact and spongy bone?

9. How are these differences related to the functions of these types of bone?

10. How do marrow in the medullary cavity compare with the marrow in the spaces of the spongy bone?

Review!! Describe each of the following (label on a diagram)

A. Osteocyte
B. Lacunae
C. Haversian Canal
D. Volkmannôs Canal
E. Canaliculi
F. Osteon
G. lamellae

Part II: Organization of the Skeleton

1. The extra bones that sometimes develop between the flat bones of the skull are called_____.
2. The cranium and facial bones compose the_____.
3. The_____at the inferior end of the sacrum is composed of several fused vertebrae.
4. Most ribs are attached to the _____anteriorly.
5. The thoracic cage is composed of_____pairs of ribs.
6. The scapulae and clavicles together form the_____.
7. The humerus, radius, and _____articulate to form the elbow joint.
8. The wrist is composed of eight bones called_____.
9. The _____covers the anterior surface of the knee.
10. The bones that articulate with the distal ends of the tibia and fibula are called_____.
11. All finger and toe bones are called _____.
12. The _____suture joins the frontal bone to the parietal bones.
13. The parietal bones are firmly interlocked along the midline by the _____suture.
14. The _____suture joins the parietal bones to the occipital bone.
15. The temporal bones are joined to the parietal bones along the _____sutures.

B. Match the bones with the characteristics.

a. inferior nasal concha	e. nasal
b. lacrimal	f. palatine
c. mandible	g. vomer
d. maxillary	h. zygomatic

_____1. forms bridge of nose
____ 2. Only movable bone in the skull
____ 3. Contains Coronoid Process
____ 4. Creates prominence of cheek inferior and lateral to the eye
____ 5. Contains sockets of upper teeth
____ 6. Forms inferior portion of nasal septum
____ 7. Scroll-shaped bone
____ 8. Forms anterior portion of zygomatic arch
____ 9. Forms anterior roof of mouth
____ 10. Contains mental foramen
____ 11. Forms posterior roof of mouth

16. The vertebral column encloses and protects the_____.
17. The number of separate bones in the vertebral column of an infant is_____.
18. The thoracic and pelvic curvatures of the vertebral column are called _____curves.
19. The _____of the vertebrae support the weight of the head & trunk.
20. The vertebral foramen provides a passageway for_____.
21. The first vertebra is also called the_____.
22. The last 2 pairs of ribs that have no cartilaginous attachments to the sternum are sometimes called _____ribs.
23. The medial ends of the clavicles articulate with the _____of the sternum.
24. The _____is a bone that serves as a brace between the sternum and the scapula.
25. The pelvic girdle consists of two_____.
26. The pubic bones come together anteriorly to form the joint called the _____.

Movements

a. Abduction	k. hypertension
b. Adduction	l. inversion
c. Circumduction	m. lateral flexion
d. Depression	n. opposition
e. Dorsiflexion	o. plantar flexion
f. Elevation	p. pronation
g. Eversion	q. protraction
h. Extension	r. retraction
i. Flexion	s. rotation
j. Gliding	t. supination

___ 1. Reduces the angle
___ 2. Elevates heels; tip toe
___ 3. Moves superiorly
___ 4. Dig in heels and pull up toes
____ 5. Two surfaces slide past each other
____ 6. Turns palm from back to front
____ 7. Increases the angle
____ 8. Moving backward on horizontal plane
____ 9. Moves towards the body
____ 10. Turns palm from front to back
____ 11. Move arm in circle
____ 12. Movement of thumb to palm
____ 13. Moves sole outward
____ 14. Moves inferiorly
____ 15. Extends past the anatomical position
____ 16. Movement to the side
____ 17. Moves sole inward
____ 18. Vertebral column bends to side
____ 19. Moving forward on horizontal plane
____ 20. Moves away from the body

REVIEW FRACTURES!!
REVIEW TYPES OF JOINTS!!

Ball and socket	**Gliding**
Hinge	**IMMOVABLE**
Pivot	