

Anatomy & Physiology
Chapter 1 Study Guide

Name: _____

1. Study of the human body first began with earliest humans because
 - a. our early ancestors were curious about the world around them.
 - b. they were as interested in their body parts and their functions as we are today.
 - c. of their concern with illness and injury.
2. Which of the following factors sets the stage for early knowledge of the human body?
 - a. a belief that spirits or gods controlled sickness and health
 - b. the growing experience of medicine men as they treated the sick with herbs and potions
 - c. the development of paper
 - d. the ability to ask questions and record the answers
3. The development of modern science began with:
 - a. rejection of the belief in supernatural forces
 - b. the growing experience of medicine men in the treatment of illness and injury
 - c. the belief that natural processes were caused by forces that could be understood
 - d. the ability to ask questions and record the answers
4. What languages form the basis of the language of anatomy and physiology?
5. The branch of science that deals with the structure of body parts is _____.
6. The branch of science that studies how body parts function is _____.
7. The function of a part is (always, sometimes, never) related to its structure.
8. While knowledge of physiology continues to develop, knowledge of anatomy does not change.
 - a. True
 - b. False
9. List the levels of organization of the body in order of increasing complexity, beginning with the atom.
10. The sum total of chemical reactions in the body that break substances down and build them up is _____.
11. List those characteristics that humans share with other organisms.
 - a.
 - b.
 - c.
 - d.
 - e.
 - f.
 - g.
 - h.
 - i.
 - j.
12. The most abundant chemical in the human body is _____.
13. Food is used as a(n) _____ source to build new _____ and to participate in the regulation of chemical reactions.
14. Oxygen is used to release _____.
15. An increase in temperature _____ the rate of chemical reactions.
16. The action of the heart creates _____ pressure in the blood vessels.
17. Homeostasis means
 - a. maintenance of a stable internal environment.
 - b. integrating the functions of the various organ systems.
 - c. preventing any change in the organism.

18. Match the terms related to homeostasis in column A to the definitions in column B.
- | | |
|----------------|--|
| a. homeostasis | 1. ___ a point which tells what a particular value should be |
| b. receptors | 2. ___ provide information about specific conditions in the internal environment |
| c. effectors | 3. ___ cause responses which alter conditions in the internal environment |
| d. set point | |
19. The portion of the body that contains the head, neck, and trunk is called the _____.
20. The arms and legs are called the _____ portion.
21. The major cavities of the axial portion of the body _____ cavity, the _____ canal, the _____ cavity, and the _____.
22. The inferior boundary of the thoracic cavity is the _____.
23. The heart, esophagus, trachea, and thymus gland are located in the _____, which separates the thoracic cavity into two compartments.
24. The pelvic cavity is
- the portion of the abdominopelvic cavity below the pelvic brim.
 - the portion of the abdomen that contains the internal reproductive organs and the urinary bladder.
 - the portion of the abdomen surrounded by the bones of the pelvis.
25. List the four body cavities located in the head.
26. The visceral and parietal pleural membranes secrete a serous fluid into a potential space called the _____.
27. The heart is covered by the _____ membranes.
28. The peritoneal membranes are located in the _____ cavity.
29. The covering of the body is made of an organ and various accessory organs known as the _____ system.
30. Match the systems listed in the first column with the functions listed in the second column.
- | | |
|----------------------------|---------------------------------|
| ___ a. nervous system | 1. reproduction |
| ___ b. muscular system | 2. processing and transporting |
| ___ c. circulatory system | 3. integration and coordination |
| ___ d. respiratory system | 4. support and movement |
| ___ e. skeletal system | |
| ___ f. digestive system | |
| ___ g. lymphatic system | |
| ___ h. endocrine system | |
| ___ i. urinary system | |
| ___ j. reproductive system | |
31. Which of the following positions of body parts is (are) in *anatomical* position?
- | | |
|---|------------------------------|
| a. palms of hands turned toward sides of body | c. arms at side |
| b. standing erect | d. face toward left shoulder |
32. Terms of relative position are used to describe the
- | | |
|--|---|
| a. relationship of siblings within a family. | c. location of one body part with respect to another. |
| b. importance of the various functions of organ systems in maintaining life. | |
33. A sagittal section divides the body into
- | | |
|------------------------------------|-------------------------------------|
| a. superior and inferior portions. | c. anterior and posterior portions. |
| b. right and left portions. | |
34. The terms *epigastric*, *hypochondriac*, and *iliac* are examples of _____.