Anatomy and Physiology Chapter 1 Exam Study Guide

The Human Body

1. What is the difference between anatomy and physiology? Be able to identify between examples of each.

2. Know the levels of structural organization of the human body starting at the molecular level and ending with the organism.

3. What is the smallest living unit of all living things?

4. Can an organ be part of more than one organ system? Give an example and explain.

5. Which organ system picks up leaked fluids and returns it to the blood?

6. Which muscles make up the muscular system?

7. To which two systems do the ovaries and testes belong?

8. What are the necessary life functions for humans and many other animals?

9. Which survival need is required in order to release energy from food?

10. Be familiar with the correct order of the elements that make up a control system. (homeostasic mechanism)

11. Define homeostasis, and explain its importance to survival.

12. Know how to describe correct anatomical position.

13. Be familiar with the various orientation and directional terms regarding the human body.

14. Identify the five human body cavities and the organs that each contains.

15. Know the locations of the major organs.

16. Be familiar with the planes of the human body.

17. Be able to label the four major quadrants of the abdominopelvic cavity.

18. Be able to label the nine abdominopelvic quadrants.

19. Know the body regions covered in class.

20. **Match each body system to its main function**

A. Endocrine B. Cardiovascular C. respiratory
D. Lymphatic E. Muscular F. Reproductive
G. Skeletal H. Integumentary I. Urinary
J. Nervous K. Digestive

_____ Body movement of trunk and limbs; provides structure and support
_____Eliminates wastes; maintains water and chemical balance
____ Defends and protects the body against infection and disease
____ Maintains homeostasis by secreting hormones
____ Produces sperm and eggsô produces offspring
____ Delivers oxygen to and removes carbon dioxide from blood
____ Makes food soluble and passes nutrients to the blood
____ Regulates most body systems with impulses transmitted by neurons
____ Allows for support, protection, attachment of muscles, storage nutrients and produces blood
____ Protects against pathogens and water loss; contains sensory receptors
____ Transports oxygen, carbon dioxide, and nutrients to and from all body tissues
____ Returns tissue fluid to the blood and destroys pathogens that enter the body

21. _____ is the study of life.
22. The wrist is _____ to the elbow.

23. The plane that divides the body into equal left and right halves?
24. The upper arm is called what?
25. The chest is _____ to the umbilicus.
26. The eyes are _____ to the nose.
27. What are the two terms to describe the front of the body.
28. While standing up, the direction of caudal is _____.
29. The chin is _____ to the nose.
30. The index finger is _____ to the ring finger.
31. A person lying face up is called _____.
32. A person lying face down is called _____.
33. The skin is _____ to the muscles.
34. The middle toe is _____ to the little toe.
35. The branch of biological science that deals with the function of organs and systems is called _____.
36. The branch of biological science that deals with the external and internal structure of body parts is called _____.
37. What plane divides the body into anterior and posterior portions.
38. Away from a point of attachment:
39. Away from the body surface:
40. The kidneys and urinary bladder are organs of what system?
41. The pituitary gland and thyroid gland are organs of what system?
42. What is a stable internal condition called?

43. The diaphragm separates what two cavities?

44. The small intestines and the stomach are found in what cavity?
45. The heart and lungs are found in what cavity?
46. The organs of the circulatory, digestive, and urinary system are found in what cavity?

47. The brain and spinal cord are found in what cavity?
48. **Write the structure that the following regions correspond to (this is not all of the regions!)**

Abdominal:
Acromial:
Antecubital:
Axillary:
Brachial:
Buccal:
Calcaneus:
Cervical:
Cranial:
Femoral:
Gluteal:
Hallux:
Inguinal:
Lumbar:
Manus:
Olecranon:
Oral:
Orbital:
Otic:
Palmar:
Patellar:
Plantar:
Pollex:
Popliteal:
Sternal:
Tarsal: