

Name: _____

Period: _____

Unit 1: Body Plan & Organization

Test Review

1. Define anatomy and contrast it with physiology.

2. Arrange and identify, in order, the six levels of structural organization of the human body. Lowest to highest.
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.

3. Define the following terms:
 - a. Metabolism:

 - b. Anabolism:

 - c. Catabolism:

4. Define the following terms:
 - a. Posterior:

 - b. Anterior:

 - c. Medial:

 - d. Lateral:

 - e. Proximal:

 - f. Distal:

 - g. Superficial:

 - h. Deep:

 - i. Superior:

 - j. Inferior:

5. Identify the planes commonly used to divide the body portions.
 - a. Sagittal:
 - b. Midsagittal:
 - c. Transverse or Horizontal:
 - d. Frontal or coronal:
6. Identify the body organs located within each cavity.
 - a. Dorsal:
 - Vertebral:
 - Cranial:
 - b. Ventral:
 - Thoracic:
 - i Mediastinum:
 - ii Pleural:
 - ii Pericardial:
 - Abdominopelvic:
 - i Abdominal:
 - ii Pelvic:
7. Identify the location of the following abdominal quadrants for each organ that is listed.
 - a. Liver
 - b. Cecum & appendix
 - c. Spleen
 - d. Stomach
 - e. left kidney
 - f. Left ovary
8. Define homeostasis and stress.
9. Describe the components of a feedback mechanism.

Unit 1: Body Plan & Organization

Test Review - KEY

1. Define anatomy and contrast it with physiology.
Anatomy: The scientific study of structures and the relationship of structures to each other. (FORM)
Physiology: The scientific study of how body parts and systems function to perform life processes (FUNCTION)
2. Arrange and identify, in order, the six levels of structural organization of the human body. Lowest to highest.
 1. chemical
 2. cellular
 3. tissue
 4. organ
 5. organ system
 6. organism
3. Define the following terms:
 - a. Metabolism: The sum of all chemical processes that occur in the body. Metabolism refers specifically to the processes associated with turning nutrients into energy.
 - b. Anabolism: Uses energy to synthesize or manufacture new tissue or molecules.
 - c. Catabolism: The breakdown of tissue or chemical structures to produce energy.
4. Define the following terms:
 - a. Posterior: dorsal surface of the body
 - b. Anterior: ventral surface of the body
 - c. Medial: close to the midline
 - d. Lateral: away from the midline
 - e. Proximal: near the point of origin
 - f. Distal: away from the point of origin
 - g. Superficial: on the surface or shallow
 - h. Deep: away from the exterior surface or further into the body
 - i. Superior: above
 - j. Inferior: below

5. Identify the planes commonly used to divide the body portions.
 - a. Sagittal: A vertical plane (lengthwise) that divides the body or an organ into right and left sections.
 - b. Midsagittal: A vertical plane (lengthwise) that divides the body or an organ into equal right and left halves.
 - c. Transverse or Horizontal: A horizontal plane that divides the body or an organ into superior (upper) and inferior (lower) sections.
 - d. Frontal or coronal: A plane that divides the body or an organ into anterior (front) and posterior (back) sections.
6. Identify the body organs located within each cavity.
 - a. Dorsal:
 - Vertebral: spinal cord
 - Cranial: brain
 - b. Ventral:
 - Thoracic:
 - i Mediastinum: esophagus, trachea, thymus, pericardial cavity, and heart
 - ii Pleural: lungs
 - ii Pericardial: heart
 - Abdominopelvic:
 - i Abdominal: stomach, spleen, liver, gallbladder, pancreas, small intestine, and most of the large intestine
 - ii Pelvic: urinary bladder, cecum, appendix, sigmoid colon, rectum, and the male or female internal reproductive organs
7. Identify the location of the following abdominal quadrants for each organ that is listed.
 - a. Liver: RUQ
 - b. Cecum & appendix: RLQ
 - c. Spleen: LUQ
 - d. Stomach: LUQ
 - e. left kidney: LUQ
 - f. Left ovary: LLQ

8. Define homeostasis and stress. Homeostasis is the body's ability to maintain a stable internal environment despite changes that occur internally or externally
Stress is any stimulus which creates an imbalance in the body's internal environment.

9. Describe the components of a feedback mechanism.

1. Stimulus

Any stress that changes a controlled condition.

2. Receptor

Monitors changes in the controlled condition and then sends information (Input) to the control center.

3. Control Center

An area in the body that receives information about the status of a controlled condition from a receptor and then determines an appropriate course of action.

4. Effector

Receives information from the control center and then produces a response.

5. Response

The action of the effector