

Chapter 1: The Human Organism

I. Anatomy and Physiology

A. Anatomy - study of structure

1. Studying structural changes from conception to adulthood is called:

2. Embryology is the study of _____

3. The study of cellular structure is referred to as _____

4. A histologist studies the anatomical structure of _____

5. Gross anatomy refers to _____

6. Studying one body system at a time is _____

7. Studying all structures contained in the arm is _____

8. Surface Anatomy refers to _____

9. Creating pictures of internal body structures is _____

B. Physiology - study of function

1. A cell physiologist would study _____

2. Studying how the mouth, esophagus, stomach, and intestines function together to digest food would be an example of _____

II. Structural and Functional Organization

A. Chemical Level

1. Basic components are _____

2. The basic components are joined together to form _____

B. Cell Level

1. Basic unit of _____

2. Made up of small structures called _____

C. Tissue Level

1. Composed of: _____

2. Four basic types: _____, _____
_____, and _____

D. Organ Level

1. Composed of: _____

E. Organ System Level

1. Composed of: _____

F. Organism Level

1. In humans a _____

III. The Human Organism - Characteristics of Life

A. Organization

1. Large _____ are organized into _____
which in turn form _____

B. Metabolism

1. Consists of _____

C. Responsiveness

1. Sense _____ and
_____ to the changes

D. Growth

1. Due to cells increasing in _____ or _____

E. Development = _____

1. A primitive cell becoming specialized for vision is _____
2. Body changes that occur at puberty are _____

F. Reproduction

1. Involves formation of _____ or _____

IV. Homeostasis

A. Homeostasis is _____

1. Body conditions that change over time are known as _____
2. The normal value for a body condition is referred to as _____
3. Body conditions are not constant but vary within a _____

B. Negative Feedback

1. Negative means that _____
2. Negative feedback maintaining homeostasis involves:
 - a. Deviation from the set point called a _____
 - b. The deviation being detected by a _____
 - c. The deviation being analyzed by the _____
 - d. The _____ moving the variable back toward the set point.

C. Positive Feedback

1. Positive means that a deviation from set point causes _____

V. Terminology and the Body Plan

A. Body Positions

1. Describe "anatomic position": _____

2. If you lay down on your back you are _____
3. If you lay down on your stomach you are _____

B. Directional Terms

1. The proper anatomical term for up is _____
2. The proper anatomical term for down is _____

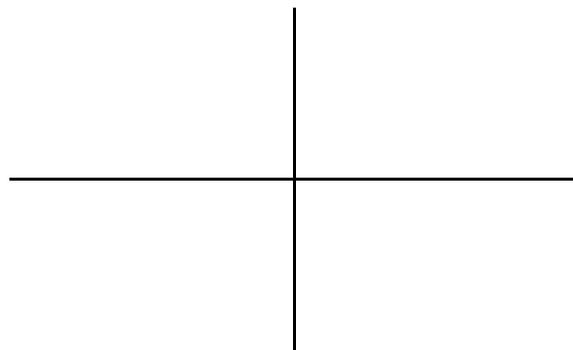
3. The proper anatomical term for front is _____
4. The proper anatomical term for back is _____
5. The term "cephalic" is synonymous with _____
6. The term "caudal" is synonymous with _____
7. In humans the term "ventral surface" refers to the _____
8. In humans the term "dorsal surface" refers to the _____
9. The end of a structure nearer the point of origin is _____
10. The end of a structure farther from the point of origin is _____
11. A structure closer to the midline of the body is said to be _____
12. A structure farther from the midline of the body is _____
13. Structures near the body surface are referred to as _____
14. Structures that are in the interior of the body are said to be _____

C. Body Parts and Regions

1. The body from the shoulder to the elbow is properly called _____
2. The body from the elbow to the wrist is properly called _____
3. The body from the hip to the knee is properly called _____
4. The body from the knee to the ankle is properly called _____
5. Label the four quadrants of the abdomen on the diagram below:

Right

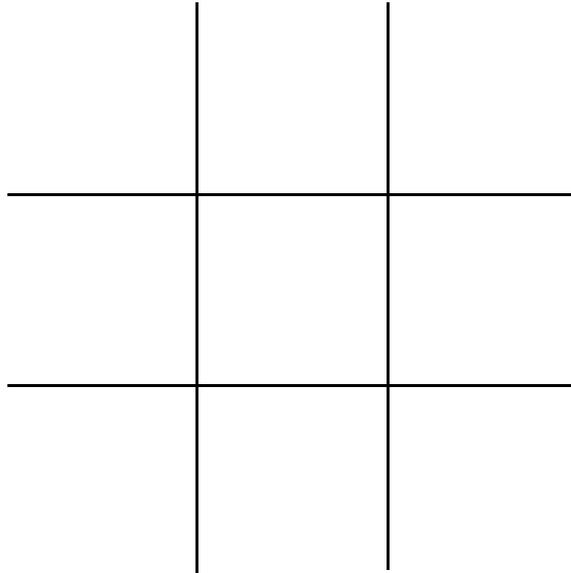
Left



6. Label the nine regions of the abdomen on the diagram below:

Right

Left



D. Planes

1. What vertical plane divides the body into right and left portions?

2. What vertical plane divides the body into equal right and left halves?

3. What plane divides the body into superior and inferior portions?

4. What vertical plane divides the body into anterior and posterior portions?

5. Cutting through the long axis of an organ creates a _____

6. Cutting at right angles to the long axis of an organ creates a _____

7. An oblique section is created by _____

E. Body Cavities

1. Thoracic Cavity

a. Located: _____

b. Median portion, which is known as the _____

- c. On either side of the median portion are found the _____
2. Abdominal Cavity
- Enclosed by _____
 - Contains the _____
3. Pelvic Cavity
- Enclosed by _____
 - Contains the _____
4. Term "abdominopelvic cavity" refers to _____
- F. Serous Membranes
- Found _____ and _____
 - Visceral serous membrane will be found _____
 - Parietal serous membrane will be found _____
 - Between serous membranes is _____ which _____

 - The pericardial cavity is found _____
 - The pleural cavity is found _____
 - The peritoneal cavity is found _____
 - Mesenteries
 - Composed of _____
 - Connect what to what? _____

 - Functionally mesenteries _____
and _____
 - Organs that are directly attached to the body wall and covered only with a parietal peritoneum are referred to as being _____