

## Chapter 1 Worksheet: Organization of the Body

### I. Directional Term

1. An anatomist cuts a cadaver with a large saw in a way that divides the cadaver into equal left and right halves. The cut is along the \_\_\_\_\_ plane.
2. In many study skulls, the top of the skull can be removed so that inner features can be seen. Along which plane should one cut to open the top of a human study skull? \_\_\_\_\_
3. A surgeon makes an incision medially from the left axillary region, turning inferiorly at the midline and proceeding to the pubic region. The path of the cut can be mapped on the patient's chest as:
  - a.  $\Gamma$
  - b.  $\perp$
  - c.  $\perp$
  - d.  $\neg$
  - e.  $-$
  - f.  $/$
4. Soccer players often wear shin protectors, which shield the \_\_\_\_\_ region of each leg.
5. The head is \_\_\_\_\_ to the feet.
6. A leg amputation is likely to involve a \_\_\_\_\_ cut of section, through bone.
7. The first finger is \_\_\_\_\_ to the hand, no matter which position it is in.
8. The shoulder is \_\_\_\_\_ to the elbow, no matter how one's arm is held.
9. The skin is \_\_\_\_\_ relative to the skeleton.
10. An occipital scar is on the back of the \_\_\_\_\_.
11. The thoracic wall is lined with the \_\_\_\_\_ layer of the double-layered pleural membrane.
12. The stomach is \_\_\_\_\_ to the diaphragm.
13. The nose is located on the \_\_\_\_\_ surface of the body.
14. The lungs lie \_\_\_\_\_ to the heart.
15. The elbow lies \_\_\_\_\_ to the forearm.

### II. Body Cavities, Regions, Planes

1. In anatomical position the subject is (seated or standing) with the head facing (sideways or forward), the arms (at the side or parallel to ground) and the palms facing (forward or backward).
2. The midsagittal plane divides the body into (equal or unequal) parts.
3. A frontal plane divides the body into (anterior and posterior or superior and inferior) sections.
4. A transverse plane divides the body into (right and left or upper and lower) sections.
5. The coronal plane is also referred to as the \_\_\_\_\_ plane.
6. The dorsal body cavity contains the
  - a. Brain and spinal cord
  - b. Abdominal organs
  - c. Pelvic organs
  - d. Thoracic regions

7. The ventral body cavity contains the
  - a. Thoracic and abdominopelvic cavities
  - b. Thoracic cavity only
  - c. Abdominopelvic cavity only
  - d. Brain and spinal cord
8. The abdominopelvic cavity contains all of the following except the
  - a. Kidneys
  - b. Pancreas
  - c. Lungs
  - d. Trachea
9. The mediastinum contains all of the following except
  - a. Esophagus
  - b. Aorta
  - c. Lungs
  - d. Trachea
10. The axial portion of the body consists of what parts?

### III. Levels of Organization

1. \_\_\_\_\_ are combinations of atoms forming larger chemical aggregates.
2. Mitochondria, Golgi apparatus, and ER are examples of \_\_\_\_\_.
3. \_\_\_\_\_ are many similar cells that act together to perform a common function.
4. \_\_\_\_\_ are the most complex units that make up the body.
5. \_\_\_\_\_ are a group of several different kinds of tissues arranged to perform a special function.
6. \_\_\_\_\_ are collections of molecules to perform a function.
7. \_\_\_\_\_ are the smallest living units of structure and function.

### IV. Homeostasis

1. Negative feedback control systems \_\_\_\_\_ change.
2. Positive feedback control systems \_\_\_\_\_ change.
3. Negative feedback systems are (inhibitory or excitatory).
4. The process of childbirth, in which the baby's head causes increased stretch of the reproductive tract, which in turn feeds back to the brain, this triggering the release of oxytocin, is an example of \_\_\_\_\_ feedback.