

Name _____ Date _____

Chapter 1 Lab Investigation: The Language of Anatomy

Purpose

In this investigation you will practice identifying body planes and directional terms.

Materials

your textbook, your body

Procedure

Follow the directions below and refer to your textbook as needed to answer the questions.

Body Planes

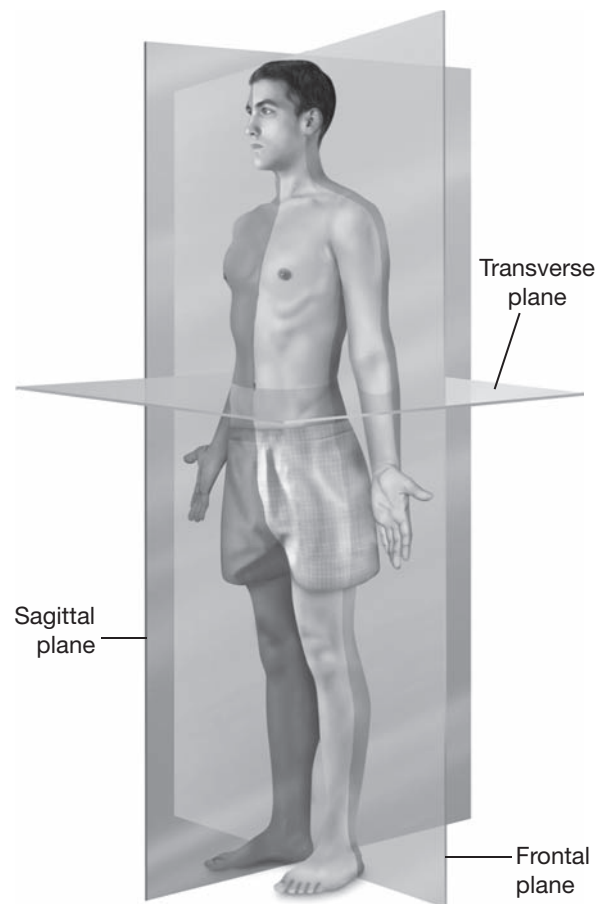
- Stand in anatomical position.
 - Your feet point in which direction?

 - Your thumbs point in which direction?

 - Your fingers point in which direction?

 - Your palms face which direction?

- With your palm open and your thumb pointing up, use your right index finger to follow a sagittal plane on your body. As you do this, which direction (right or left) does your palm face? _____
- With your palm open and your thumb pointing up, use your right index finger to follow a frontal plane on your body. As you do this, which direction (front or back) does your palm face? _____
- With your palm open and your thumb pointing away from your body, use your right little finger to follow a transverse plane on your body. As you do this, which direction (up or down) does your palm face? _____



Directional Terms

- Place your left index finger on the tip of your nose.
 - List a body part that is superior to your nose. _____
 - List a body part that is inferior to your nose. _____
 - List a body part that is lateral to your nose. _____
 - List a body part that is posterior to the tip of your nose. _____
 - Is there a body part medial to the tip of your nose? _____
 - Is there any body part that is anterior to the tip of your nose? _____

2. Standing in anatomical position, place your left index finger on the anterior surface of your right elbow.
 - A. List a body part that is distal to your right elbow. _____
 - B. List a body part that is proximal to your right elbow. _____
 - C. List a body part that is lateral to your right elbow. _____
 - D. List a body part that is medial to your right elbow. _____
3. Place your right index finger on your left collarbone.
 - A. List a body part that is medial to your left collarbone. _____
 - B. List a body part that is lateral to your left collarbone. _____
 - C. List a body part that is deep to your left collarbone. _____
4. Place your left index finger on your left cheek.
 - A. List a body part that is anterior to your left cheek. _____
 - B. List a body part that is posterior to your left cheek. _____
 - C. List a body part that is medial to your left cheek. _____
5. Place your left index finger on your belly button.
 - A. List a body part that is lateral to your belly button. _____
 - B. List a body part that is deep to your belly button. _____
 - C. List a body part that is superior to your belly button. _____
 - D. List a body part that is inferior to your belly button. _____
6. Place your right index finger on your left knee.
 - A. List a body part that is superior to your left knee. _____
 - B. List a body part that is distal to your left knee. _____
 - C. List a body part that is proximal to your left knee. _____

Conclusions

1. Which body plane divides the body into left and right halves? _____
 2. Which body plane divides the body into top and bottom halves? _____
 3. Which body plane divides the body into front and back halves? _____
 4. Circle the body parts listed below that are divided into two pieces by a mid sagittal plane: nose, mouth, left eye, right leg, belly button, heart, right lung, left kidney
 5. Circle the body parts listed below that are divided into two pieces by a frontal plane through the middle of the body: belly button, right lung, left kidney, nose, heart, left eye, brain, left leg
 6. Circle the body parts listed below that are divided into two pieces by a transverse plane through the abdomen: brain, stomach, kidney, right leg, left arm, left eye, nose
- Select the correct word from the two choices and write it in the blank to the right.*
7. Your head is (superior, inferior) to your neck. _____
 8. Your thumb is (medial, lateral) to your fingers. _____
 9. Your belly button is (superficial, deep) to your intestines. _____
 10. Your forearm is (distal, proximal) to your hand. _____
 11. Your sternum is (anterior, posterior) to your spinal cord. _____