

Name _____ Date _____

Chapter 3 Lab Investigation: Membranes and Skin

Purpose

In this activity you will identify membranes and investigate skin thickness.

Materials

your textbook, your body

Procedure

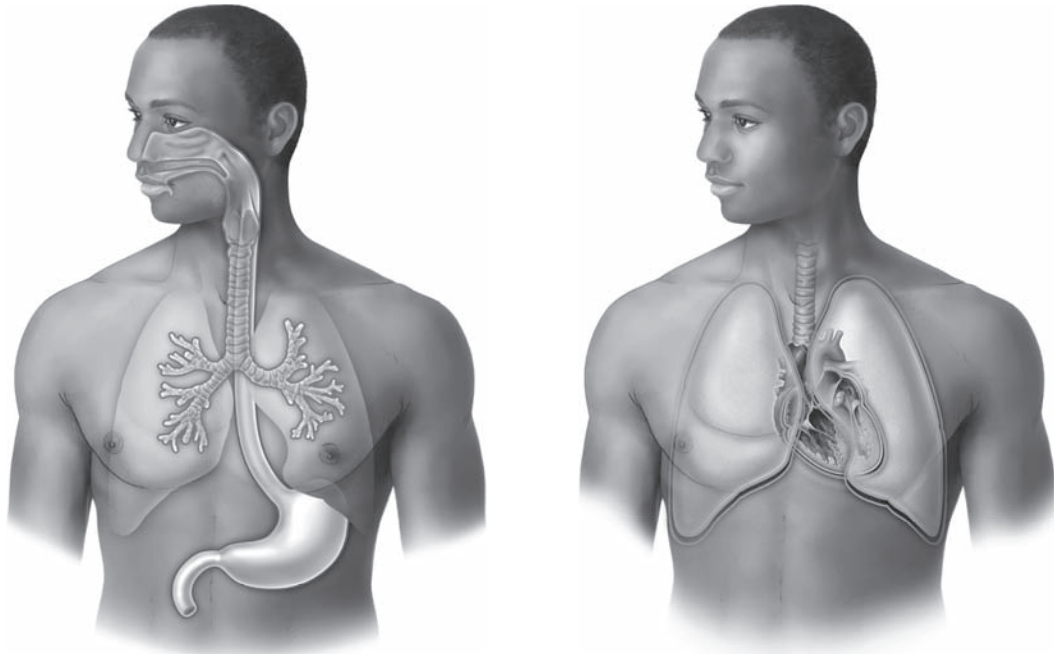
Membranes

1. What type of epithelial membrane covers the outside surface of the body?

2. What type of epithelial membrane lines body cavities that are open to the outside world?

3. What type of epithelial membrane lines body cavities that are not open to the outside world?

4. Point to the three types of epithelial membranes in the illustrations below.



Skin Thickness Variability

In this investigation you will use the thicknesses of two areas of your skin as a standard to compare thicknesses of selected skin areas of your body. Pinch your skin in these two areas to gauge the thickness of your skin:

- skin just superior to your eyelid
- skin on the posterior surface of your neck

Pinch your skin in the areas listed below to compare the skin thickness of each area with the eyelid and posterior neck thicknesses. Next to each area, write *same as eyelid*, *same as posterior of neck*, or *in between*. Compare your results with those of your classmates. (Note: if you are unsure of any of the locations listed below, review what you learned about anatomical position and directions in chapter 1.)

1. anterior surface of forearm _____
2. posterior surface of hand _____
3. palm of hand _____
4. medial surface of upper arm _____
5. forehead superior to eyebrow _____
6. sole of foot _____
7. dorsal surface of lower leg _____
8. superior surface of foot _____
9. lateral surface of abdomen _____
10. anterior surface of abdomen _____
11. anterior surface of neck, below Adam's apple _____
12. dorsal surface of elbow _____

Conclusions

Membranes

Classify the linings of these organs or areas as serous or mucous membranes:

1. visceral pericardium _____
2. esophagus _____
3. parietal peritoneum _____
4. abdominal cavity wall _____
5. trachea _____
6. small intestine _____

Skin Thickness Variability

1. Which area of the skin was the thickest? _____
2. Which area of the skin was the thinnest? _____
3. What, if any, variations did you notice between different classmates with regard to the different thicknesses that you measured?
