

## BIOLOGY 11 – PRE-LAB EXERCISE

# 5

Name: \_\_\_\_\_

Lab Day & Time: \_\_\_\_\_

### Human Body Tissues

1. Refer to **Figure 5.1** in the *Lab Manual* and the accompanying photomicrographs (photos taken with a microscope) of a variety of human tissues. List and describe the four steps needed to process a piece of body tissue to make a prepared slide such as one of these.

How is the photomicrograph of the blood cells different from the other pictures in **Figure 5.1**? (Hint: Refer back to **Figure 2.3** in Lab 2.)

2. a) Name each of the four major (primary) types of tissues in the human body; b) describe the distinguishing characteristic for each of these four tissue types; c) give an example (subtype) of each of these four tissue types.

<b>a) Tissue Type</b>	<b>b) Distinguishing Characteristic</b>	<b>c) Example</b>
1.		
2.		
3.		
4.		

3. What type and subtype of human tissue are sometimes ciliated?

Where are these ciliated tissues found in the human body?

What is the function of the cilia in these tissues?

What energy source is used to fuel the “molecular engines” that power the cilia to move?

4. Distinguish between “tissue” and “organ”.

5. Refer to **Figure 5.17** in the *Lab Manual* and the accompanying description of human skin.

The epidermis is mostly composed of which primary tissue type?

The dermis is mostly composed of which primary tissue type?