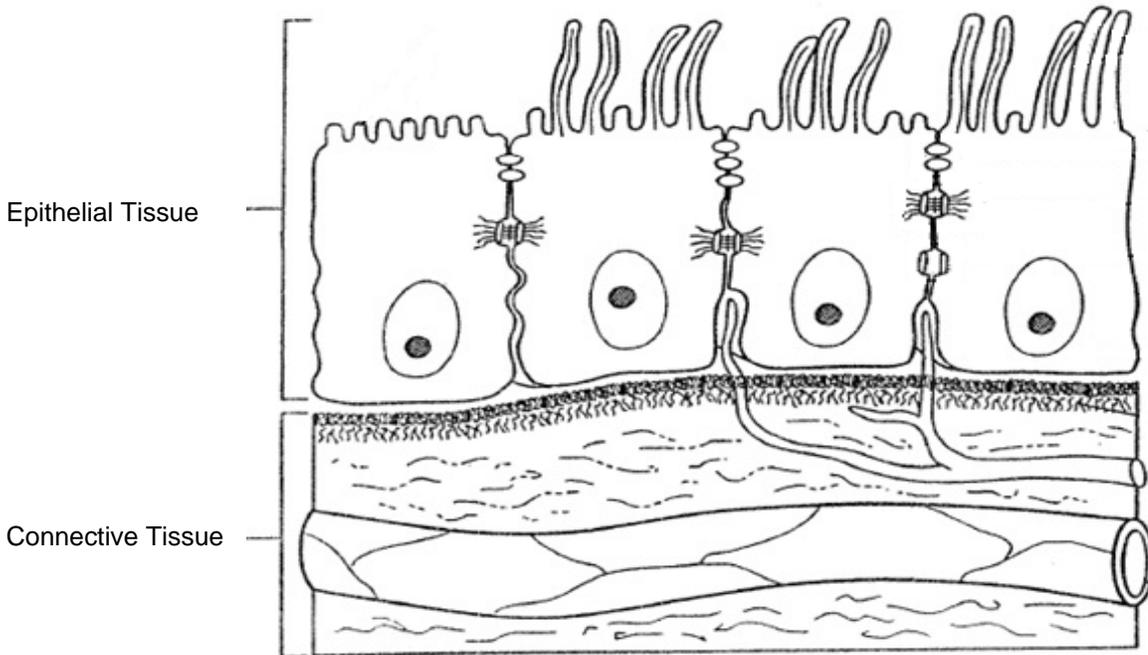


**Section 4.1- Epithelial Tissue  
Regular Anatomy**

Using different colors and the list below, color and label the different parts of an epithelial cell.



- |   |                                    |                                       |                                      |
|---|------------------------------------|---------------------------------------|--------------------------------------|
| <input type="radio"/> Apical surface    | <input type="radio"/> Cilia        | <input type="radio"/> Lateral surface | <input type="radio"/> Tight junction |
| <input type="radio"/> Basal surface     | <input type="radio"/> Desmosome    | <input type="radio"/> Microvilli      |                                      |
| <input type="radio"/> Basement membrane | <input type="radio"/> Gap junction | <input type="radio"/> Nucleus         |                                      |

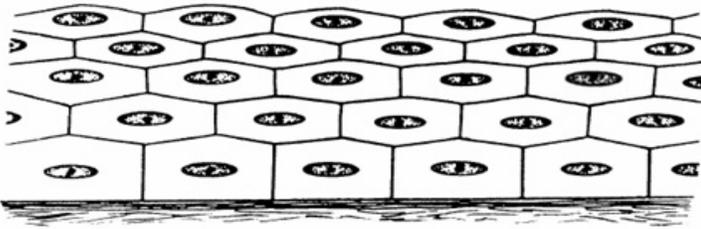
1. List 3 functions of epithelial tissue.
  
2. The process of cell division by which epithelial cells divide is called \_\_\_\_\_.
3. Epithelial tissue is avascular, which means that it lacks a direct \_\_\_\_\_ supply.
4. Epithelial tissue is classified by \_\_\_\_\_ and \_\_\_\_\_.
5. List the 3 surfaces of an epithelial cell.
  - a. The apical surface of epithelial cells is also known as the \_\_\_\_\_ because it is not attached to any other tissue.
    1. Tiny cellular extensions that increase the surface area of the apical surface of an epithelial cell are called \_\_\_\_\_.
    2. Finger-like projections on the apical surface of an epithelial cell that helps move substances along the free surface are called \_\_\_\_\_.

b. List the 3 types of cell junctions that connect the lateral surfaces of adjacent epithelial cells.

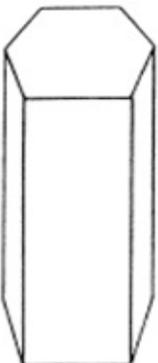
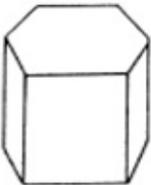
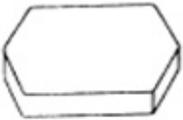
1. The type of cell junction in which parts of the lateral surface membrane fuse together forming an impermeable barrier is called a \_\_\_\_\_.
2. The type of cell junction in which a protein tunnel called a connexon allows substances to move between adjacent epithelial cells is called a \_\_\_\_\_.
3. The type of cell junction in which linker proteins (circular plaques) and protein filaments hold the lateral surfaces of adjacent epithelial cells together is called a \_\_\_\_\_.

c. The basal surface of epithelial cells is attached to an underlying tissue called the \_\_\_\_\_, which anchors epithelial tissue to other tissues.

On the diagrams below, label the epithelial tissues by the number of layers.



On the diagrams below, label the epithelial cells by shape.



Fill in the table below by identifying the name of the epithelial tissue, one location in the body, and its functions.

	Name of ET	Location in Body (1)	Functions
