**Histology**

**Station 1: Tissue Types**

*Read Section 5.1 in your book and list the four major tissue types in the body and their main functions.*

|  |  |
| --- | --- |
| **Tissue Type** | **Main Function** |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |

**Epithelial Tissue**

**Station 2: Epithelial General Characteristics**

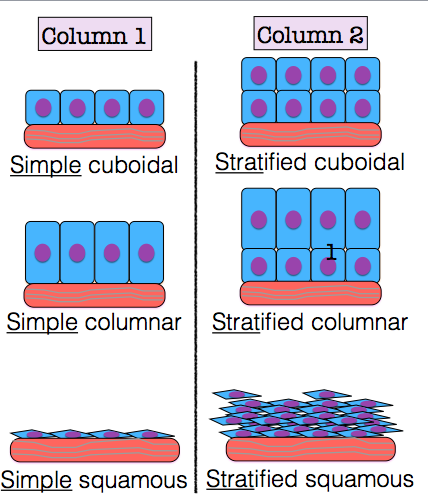
*Read section 5.2 in your book and summarize each paragraph into a general characteristic of epithelial tissue.*

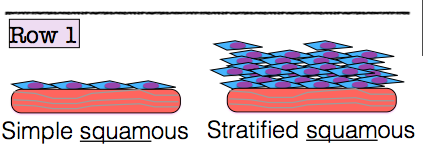
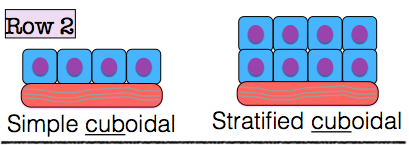
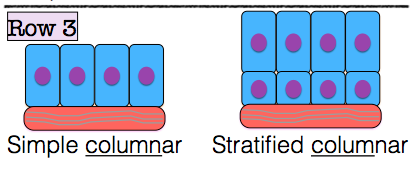
|  |
| --- |
| **General Characteristics** |
| 1. |
| 2. |
| 3. |
| 4. |
| 5. |

**Where in the body is epithelial tissue found?**  
  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
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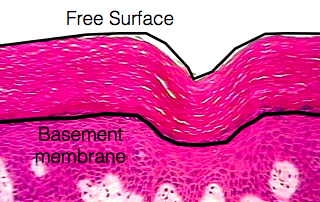
**Station 3**: **Epithelial Classification and Naming**

*Look at the diagrams provided and answer the following questions:*



1. What is the difference between the epithelial tissue in the first column and the epithelial tissue in the second column?
2. What do you think the roots “simple” and “strat” mean?
3. Now that you know epithelial tissue is named based on the number of layers that it has, look at the rows of tissue to the right. In addition to being named for layers, what is second classification for how epithelial tissue is named?
4. What shape are squamous cells?
5. What shape are cuboidal cells?
6. What shape are columnar cells?

***Station 4****: Look at the diagrams provided and answer the following questions:*

1. **Is the epithelial tissue to the right simple or stratified?

What shape are the cells?

1. **Is the epithelial tissue to the right simple or stratified?

What shape are the cells?

1. Is the epithelial tissue to the right simple or stratified?   
     
     
     
     
   What shape are the cells?

***Station 5****: Using the information provided, fill in the following chart for Epithelial Tissue*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Epithelial Tissue Chart** | | | | |
| **Type** | **Layers/Shape** | **Function** | **Location** | **Sketch** |
| **Simple**  **Squamous** |  |  |  |  |
| **Simple**  **Cuboidal** |  |  |  |  |
| **Simple**  **Columnar** |  |  |  |  |
| **Stratified Squamous** |  |  |  |  |
| **Stratified**  **Cuboidal** |  |  |  |  |
| **Stratified Columnar** |  |  |  |  |

***Station 6****: Visit each microscope and view the slide of epithelial tissue provided. Sketch each view and identify each type of tissue.*

**Epithelial Tissues**

|  |  |
| --- | --- |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Connective Tissue**

***Station 1****: Read the information provided and fill in the following table regarding the various components of connective tissue*

|  |  |  |
| --- | --- | --- |
| **General Characteristics** | | |
| **Component** | | **Main Function** |
| **Extracellular** |  |  |
| **Cell**  **Types** |  |  |
|  |  |
|  |  |
| **Fiber**  **Types** |  |  |
|  |  |
|  |  |

**Despite the variety of tissue types that are included in the category “connective tissue,” what is the main function of connective tissue?**  
  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Station 2****: Using the information provided, fill in the following chart for Connective Tissue* | | | | |
|  | | | | |
| **Connective Tissue Chart** | | | | |
| **Type** | **Made of** | **Function** | **Location** | **Sketch** |
| **Adipose** |  |  |  |  |
| **Bone** |  |  |  |  |
| **Blood** |  |  |  |  |
| **Loose Connective** |  |  |  |  |
| **Dense Connective** |  |  |  |  |
| **Hyaline Cartilage** |  |  |  |  |
| **Elastic Cartilage** |  |  |  |  |
| **Fibrocartilage** |  |  |  |  |

***Station 3****: Visit each microscope and view the slide of connective tissue provided. Sketch each view and identify each type of tissue.*

**Connective Tissues**

|  |  |
| --- | --- |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Connective Tissues Cont’d**

|  |  |
| --- | --- |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

**Muscular Tissue**

***Station 1****: Read the information provided and fill in the following table regarding the various components of muscular tissue*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Muscular Tissue Chart** | | | | | |
| **Type** | **Striated**  **or No?** | **# of Nuclei**  **(per cell)** | **Voluntary or Involuntary?** | **Location** | **Sketch** |
| **Skeletal**  **Muscle** |  |  |  |  |  |
| **Cardiac**  **Muscle** |  |  |  |  |  |
| **Smooth**  **Muscle** |  |  |  |  |  |

**\* Look at your sketches. How would you define “striated”?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Station 2****: Read the information provided and fill in the following table regarding nervous tissue.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Nervous Tissue Chart** | | | | | |
| **Type** | **Made of** | | **Function** | **Location** | **Sketch** |
| **Nervous** | **Type of Cells** |  |  |  |  |
|  |  |

***Station 3****: Visit each microscope and view the slide of muscular tissue provided. Sketch each view and identify each type of tissue.*

**Muscular Tissues**

|  |  |
| --- | --- |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name of Tissue: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Magnification: \_\_\_\_\_\_\_\_\_  Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |