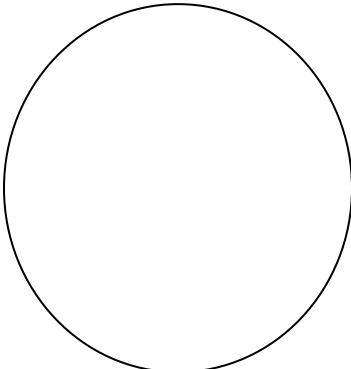
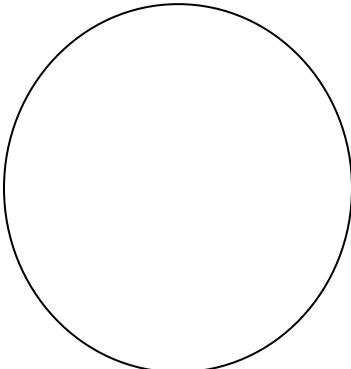


Tissue Investigation**Purpose:**

1. To relate the structure of different tissue types to their function.

Procedure:

1. Pick 2 different types of tissue (epithelial, muscular, connective, or nervous tissue).
2. Obtain a slide (strip) of the tissue.
3. Describe the appearance of the tissue you examined in your own words and record in the table.

Biological Sketches (Use biological diagram rules)	
	

Analysis & Conclusions:

4. Analyze the main types of tissues under the microscope or micro-viewer and complete the questions.

For each of the four general mammalian tissue types you examined, explain how the structure (shape, density, arrangement, extracellular material, etc.) is related to its function.

Epithelial	
Muscle	
Nerve	
Connective Tissue	

SNC2DN: Tissues

1. Squamous epithelial cells are very susceptible to cancer. Provide a *hypothesis* (a theory with explanation) for this observation.

 2. Leukemia is a cancer of the bone marrow cells that usually results in an abnormal increase in white blood cells.
 - a) Why may adult stem cells (such as bone marrow) be prone to becoming cancerous?

 - b) What possible effects could this have on the body? (see blood above)

 3. Examine the shape of the 3 muscular tissue types.
 - a) Describe the general shape of a muscle cell.

 - b) Explain the reason for this shape by referring to their function

 4. Red blood cells and the outermost layer of skin do not have nuclei. What do you think is the reason for this?

 5. Correctly identify the role of the major tissue types and enter the appropriate letter in the box.
- | | | |
|--|--|---|
| | Forms membranes | Its cells shorten to exert force |
| | Allows for the movement of limbs and for organ movements within the body | Forms endocrine (hormone) and exocrine (ie salivary, mucous) glands |
| | Uses electrochemical signals to carry out its function | Allows you to smile, grasp, and swim, ski and throw a ball |
| | Supports and reinforces body organs | Surrounds and cushions body organs |
| | Cells of this tissue may absorb and/or secrete substances | Forms the bone |
| | Basis of the major controlling system of the body | Forms the brain and spinal cord |

SNC2DN: Tissues