

Lesson 5: Observing Animal Cells

Purpose:

To learn about animal cells, the parts they contain, and how varied animals cells are in appearance.

Guiding Questions:

How do the shapes and structures of animal cells support the function of the cell

Cell Drawings

Insert picture of your drawings into this space!

Defining Key Terms

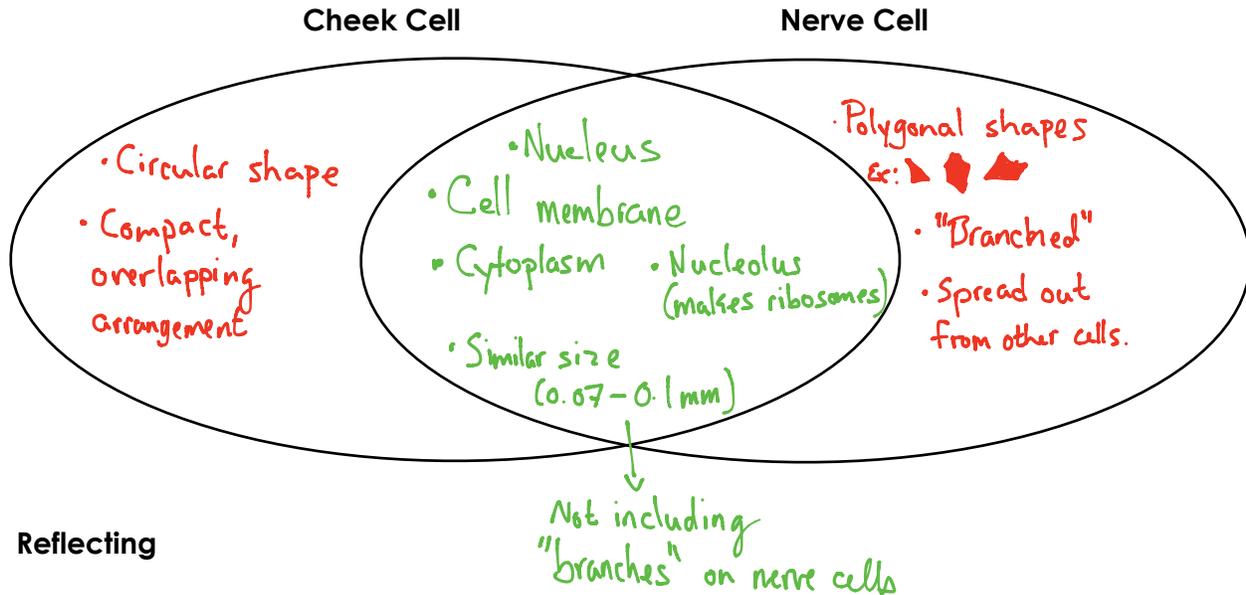
In the space below, define the parts you observed. Use page 68 to help you.

Part	Definition
Cell (Plasma) Membrane	
Cytoplasm	
Nucleus	

Continue on to the back of this sheet.

Comparing Animal Cells

In the space below, compare and contrast the cheek and nerve cells you observed.



Reflecting

1. Look at the pictures of human muscle cells and red blood cells on page 74 of your textbook. Describe their appearance **and** think of a reason for why they are shaped the way they are.

The muscle cells are rectangular and in a row. This makes it easier for the muscle tissue to expand and contract. The red blood cells are disc-shaped and are not connected to the other red blood cells. This makes it so they flow well through blood vessels.

2. How is the shape and arrangement of the cheek cells and nerve cells related to their function (job)? *Think about what function the cells serve and how their shape assists them in that function.*

The function of the cheek (skin) cells is to provide protection from pathogens. Because they are overlapped, pathogens have a harder time getting around the cells. The nerve cells function to transmit signals through the body. The nerve cells are branched and spread out. This helps the signals spread through the bodily more rapidly.

3. Do all animal cells have the same organelles? If you have time, look up the answer online to this question using human red blood cells.

No, not all animal cells have the same parts. Animal cells are specialized for the function they perform. For example, red blood cells lose their nucleus so they can carry more oxygen to other cells. Cells lining the stomach are able to produce and secrete acid for digestion.