

ANNOTATING INFORMATIONAL TEXT



- Thoughts or Wonderings



- Connection



- Confusing Part



- Interesting Fact



- Important Fact



- Circle Key Vocabulary



- Underline Main Ideas

Name _____ Date: _____

Plant and Animal Cells

Cells are the building blocks of life. All living things are made of cells. Cells come in all shapes and sizes and are the smallest things in a living organism. Most cells are invisible without a microscope. Plants and animals are both made up of cells, even though their cells look and operate differently.

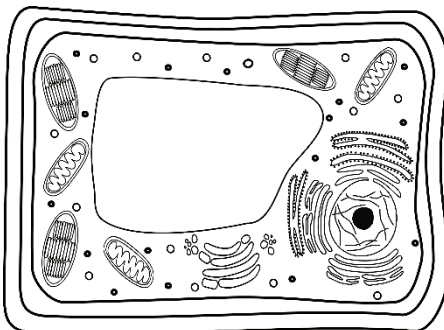
Both plant and animal cells are made up of organelles that perform various functions. These organelles are protected by a jelly-like substance called a cytoplasm. The cytoplasm holds the organelles in place. The "brain" or control center of both plant and animal cells is the nucleus. The nucleus is the organelle that controls the activities of the cell. Cells get energy from organelles known as mitochondria. Mitochondria are known as the powerhouse of the cell and act like our digestive system does. They convert nutrients into usable energy for the cell.

Those are not the only similarities between plant and animal cells. Both types of cells contain a vacuole, which is a large sac that holds food, water, and waste. The Golgi apparatus is another organelle found in both animal and plant cells. This organelle is responsible for packaging and moving proteins out of the cell. The Golgi apparatus gets the proteins from the endoplasmic reticulum. There are two different types of endoplasmic reticulum in a cell: smooth and rough. Each type of endoplasmic reticulum has a different look and purpose. Where do the proteins come from? Organelles known as ribosomes on the endoplasmic reticulum build or synthesize the proteins for the cell.

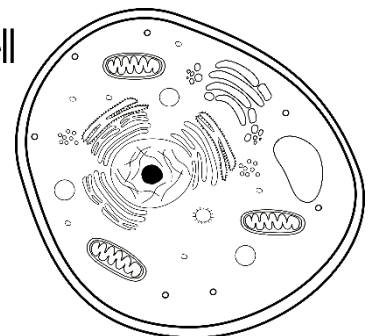
While plant and animal cells are similar, there are important differences. Plant cells contain organelles known as chloroplasts that are not present in animal cells. Chloroplasts are organelles within a plant cell that use the sun (through a process known as photosynthesis) to make food. Another difference is in the outer covering of plant cells. Both animal and plant cells have cell membranes, which control the movement in and out of the cell. A plant cell, however, has extra protection in the form of a cell wall. The cell wall is the outermost layer of a plant cell. It has several important functions to help a plant cell. A cell wall protects the cell from damage, helps make the cell strong, and helps maintain the shape of the cell.

Even though plant and animal cells have many organelles in common, the differences between the two cells have quite the impact on the makeup of the living organism.

Plant Cell



Animal Cell



Name _____ Date: _____

Plant and Animal Cells: Close Reading

Monday: Annotate the text.

Tuesday: Why are cells important?

Wednesday: Compare and contrast plant cells and animal cells.

Thursday: Summarize the text.

Friday: Answer the comprehension questions.

Name _____ Date: _____

Plant and Animal Cell Comprehension Questions:

1. Why is the nucleus referred to as the "brain" of the cell?

2. How do the Golgi apparatus, the endoplasmic reticulum, and the ribosomes all work together?

3. What is the function of chloroplasts?

4. According to the text, what are the functions of a plant cell's cell wall?
