**Organelles**

The structures inside a cell are call organelles. Each organelle has a specific job to do inside the cell.

**Cell membrane – The skin of the cell**

Like the skin on an orange, the cell membrane surrounds and protects the contents of the cell. The cell membrane isn’t just a container for the contents of the cell! It helps to control the movement of substances in and out of the cell.

**Cytoplasm – The fluid in a cell**

A large part of the inside of the cell is taken up by cytoplasm. Cytoplasm is jellylike. Like the blood in your body, cytoplasm is constantly moving inside the cell. The cytoplasm distributes materials such as oxygen and food to different parts of the cell. The cytoplasm also helps support all the other parts of the cell.

**Nucleus – The command centre of the cell**

A large, dark, round nucleus is often the most easily seen structure in the cell. The nucleus controls the cell’s activities. It contains chromosomes. Chromosomes are structures that are made out of genetic material that direct a cell’s growth and reproduction. The nucleus is enclosed inside a nuclear membrane, which controls what enters and leaves the nucleus.

**Vacuoles – The grocery store of the cell**

Balloon like spaces within the cytoplasm are storage places for surplus food, wastes, and other substances that the cell cannot use right away. These structures are called vacuoles, and are surrounded by a membrane.

**Endoplasmic reticulum – The transit system of the cell**

The endoplasmic reticulum is a folded membrane that forms a system of canals within the cytoplasm. Materials are transported through these canals to different parts of the cell, or to the outside of the cell.

**Mitochondria – The power plant of the cell**

Because cells are always working, they need energy! Their energy is produced by oval shaped organelles called mitochondria. One mitochondria is called a mitochondrion! ☺ Inside the mitochondria, tiny food particles are broken down to release their chemical energy for the cell’s activities. Some cells, such as muscle cells, have more mitochondria because they require more energy to function.

\*\*\*\* THE NEXT 2 ORGANELLES ARE ONLY FOUND IN PLANTS!!!\*\*\*\*

**Cell wall – The fortress of the plant cell**

The cell wall occurs only in the cells of plants and fungi, and in some unicellular organisms. Cell walls are much thicker and more rigid than cell membranes, and are made mostly of a tough material called cellulose. The cell wall provides support for the cell. The cell wall is not found in animal cells.

**Choroplasts – The food gatherers of the plant cell**

Chloroplasts are the structures in which the process of photosynthesis takes place. Photosynthesis uses energy from the Sun to make carbohydrates. Folded membranes inside each chloroplast contain the green pigment chlorophyll, which absorbs sunlight. Chloroplasts are found only inside cells in green plants and in some unicellular organisms. They are not found in animal cells.