

PLANT CELL SPOT THE DIFFERENCE



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Below are two pictures of a plant cell. Can you spot the 5 differences?







ANSWERS

Did you get it right?







PARTS OF A PLANT CELL





The <u>Cell Wall</u> is a strong, protective structure that surrounds the plant cell. It provides protection for plant cells and helps them to hold their shape.

The <u>Cell Membrane</u> is a thin flexible layer that helps to separate the inside of the cell from the outside. It also helps to regulate what come into the cell and what goes out.

The <u>Cytoplasm</u> is a watery gel-like substance found inside the cell. It provides structure for the cell and helps all the other parts of the cell move around.

The <u>Nucleus</u> stores the cell's genetic information in the form of deoxyribonucleic acid or DNA. DNA holds the instructions for how the cell should work.

<u>**Ribosomes**</u> use the instructions stored in DNA to make proteins. Proteins are large molecules found in all cells and carry out many important functions. For example, they help the cell wall keep its structure.

The <u>Golgi Apparatus</u> acts as the packing and distribution center of the cell. It takes in protein, modifies it, and then places it in transport vessels called vesicles that can ship the proteins to other parts of the cell or plant. The Golgi apparatus also makes lysosomes which help to clean up waste in the cell.

The **Endoplasmic Reticulum** works closely with the nucleus, ribosomes and Golgi Apparatus to make, package, and transport proteins and fats.

<u>Chloroplasts</u> carry out the process of photosynthesis. This is when water, carbon dioxide, and light energy are turned into food for the plant.

<u>Amyloplasts</u> help to make and store starch from any extra food the chloroplasts make. This means they have a store of energy ready for when they need it.

<u>Large Vacuole</u> helps to store food and water for the cell, as well as getting rid of waste and helping the cell grow. As it is so big, it also helps the cell to hold its shape.

<u>Mitochondria</u> are often called the "powerhouse" of the cell. They take larger molecules like sugar, starch, and fat, and break them down to produce energy for the cells.