Task 1

Complete the passage about cells using the words provided. You may use each word, once, more than once or not at all.

alleles amino acids carbohydrates cell membrane cellulose chlorophyll chloroplasts chromosomes cytoplasm cytoskeleton DNA double fatty acids glucose glycerol Golgi apparatus lipids mitochondria membranes nucleotide phospholipids proteins ribosomes single starch

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Cells are the basic building blocks of life, and they come in a variety of shapes and sizes depending on their function. Despite these differences, all eukaryotic cells share a common structure consisting of three main components: the, cytoplasm, and nucleus.

The surrounds the cell and controls what goes in and out. It is made up of two layers of a substance called

The cytoplasm is the gel-like substance that fills the cell between the membrane and the nucleus. It contains various organelles, which conduct specific functions necessary for the cell's survival. The cytoplasm also contains a that provide structural support and facilitate cell movement.

..... are organelles where respiration takes place. This is used to release energy for processes such as protein synthesis and muscle contraction. The mitochondria produce ATP.

...... are organelles found in plant cells that are responsible for photosynthesis. They contain, which allows the cell to capture energy from sunlight.

...... play a crucial role in protein synthesis. They are made up of two subunits, one large and one small, which work together to read the genetic information in messenger RNA (mRNA) and translate it into a specific sequence of

Ribosomes can be found in the of cells or attached to the endoplasmic reticulum. When they receive the mRNA instructions, they begin to assemble the into a chain to form a molecule.

The endoplasmic reticulum is a network of that helps transport materials around the cell.

The acts as a packaging and sorting centre for the cell. It modifies and packages proteins and lipids for transport to other parts of the cell or for export outside of the cell.

Cell walls are structures that provide support and protection for the cell. They are found in plant cells, fungi, and some bacteria. The cell wall is made up of,

which is a tough, fibrous material that helps the cell maintain its shape and protect it from damage.