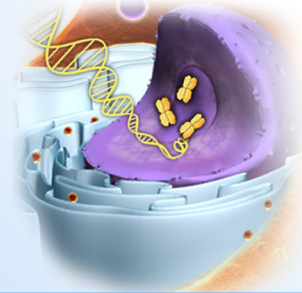


Cell Memory

Match the function activity answers



Using Cell Memory as a reference, match the cell component to its correct function. Complete the table below.

| Cell component | Function |
|-------------------------------------|---|
| Nucleus | The largest of the organelles and is at the centre of the cell. It is the storage site of the cell's DNA. |
| Rough endoplasmic reticulum | An organelle that forms an extensive network of flattened, sack-like membranes known as cisternae. It extends out from the nuclear membrane into the cytoplasm of the cell and is involved in the production, folding and transport of proteins produced by the ribosomes on its surface. |
| Mitochondria | Rod- or sausage-shaped organelles found inside cells. They are the power stations of the cell providing chemical energy in the form of adenosine triphosphate (ATP). |
| Chromosomes | Thread-like structures, made of DNA wrapped around a scaffold of proteins. Each human cell contains 46 of these structures. They contain specific regions of DNA, known as genes, sections of DNA that carry information required to make a molecule, usually a protein. |
| Smooth endoplasmic reticulum | An organelle that forms an extensive network of flattened sack-like membranes known as cisternae. It extends out from the nuclear membrane into the cytoplasm of the cell and is involved in the production of lipids and steroids (hormones) needed by the cell. |
| Centrioles | A pair of organelles found in the cell that consist of small tubes of proteins known as microtubules. These organelles play an important role in mitosis (cell division) and the positioning of the nucleus in the cell. |
| Golgi apparatus | A complex structure consisting of stacks of membrane-bound, flattened, sack-like structures known as cisternae. It functions like a cellular post office which receives, sorts, labels and dispatches proteins around the cell to where they are needed. |
| Lysosomes | Round, membrane-bound organelles that contain powerful digestive enzymes. They are the recycling centre, responsible for the disposal and recycling of waste materials within the cell. It contains enzymes that are used to break down invading microorganisms and to digest old or unwanted proteins and cell organelles. |
| Ribosomes | Tiny organelles that can be found in the cytoplasm or on the surface of the rough endoplasmic reticulum. They are where new proteins are made. |
| DNA | A molecule that contains our genetic instructions. It is made up of a four chemical bases: adenine (A), guanine (G), cytosine (C) and thymine (T). The order, or sequence, of these bases forms a set of instructions. |

Word bank

| | | | | |
|-------------|-----------------|------------------------------|-----------|--------------|
| DNA | Nucleus | Rough endoplasmic reticulum | Ribosomes | Mitochondria |
| Chromosomes | Golgi apparatus | Smooth endoplasmic reticulum | Lysosomes | Centrioles |