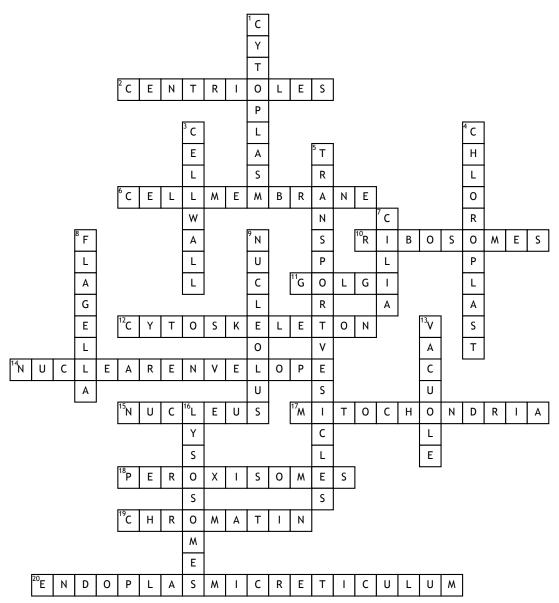
## **Cell Structure and Functions**



## <u>Across</u>

 Composed of tubulin and found in eukaryotic cells; used in cell division.
Membrane that separates the interior of the cell from the outside environment.
Constructed in the nucleus and functioning as the site of protein synthesis from within the cytoplasm. has two subunits.
Organelle in eukaryotic cells consisting of flat membranous stacks that modify, route, and store products of the ER.

**12.** Composed of microtubules, microfilaments, and intermediate filament; helps maintain cell structure.

**14.** Membrane in eukaryotes that encloses the nucleus and separates it from the cytoplasm.

**15.** The chromosome containing organelle of a eukaryotic cell.

**17.** "Powerhouse of the cell" found in eukaryotic organisms that helps the process of cellular respiration.

**18.** A microbody containing enzymes that transfer hydrogen to oxygen, producing then hydrogen peroxide.

A complex of macromolecules found in cells, consisting of DNA, protein, and RNA.
Type of organelle in the cells of eukaryotic organisms that forms an interconnected network of flattened, membrane-enclosed sacs or tube-like structures known as cisternae.

## <u>Down</u>

 Containing every organelle within the cell, bounded by the plasma membrane.
Structural layer that surrounds some types of cells, situated outside the cell membrane. **4.** Organelle found in plants that helps use sunlight to convert organic compounds into water and carbon dioxide.

5. Tiny membranous sac in a cell's cytoplasm carrying molecules produced in the cell

7. 9+2 arrangement; Short cellular

appendage specialized in locomotion. 8. 9+2 arrangement; long cellular

appendage specialized in locomotion.

**9.** Structure in the nucleus, formed from chromosomes and become active in the synthesis of ribosomes.

**13.** Enclosed compartments which are filled with water containing inorganic and organic molecules.

**16.** Spherical vesicles which contain hydrolytic enzymes that can break down all kinds of biomolecules.