

CORNELL NOTES

Name: _____ **Period: All Periods**

Class: Science **Date: 28-29 August**

Topic: Chapter 3, Section 1 Cell Structure

Question Column

Notes Column

Are Viruses Living?	No, they are not living. They are made of one strand of DNA Inside a protein coat.
Cell Membrane	Cells outer layering. Allows chemicals the cell needs to move in and out of the cells
Cytoplasm	Gelatin like material that gives the cell its shape.
Cells Shape	Determines its function – what it does.
Prokaryotes	Bacteria, that have a cell wall, cell membrane, do not have Membrane bound structures. Has a strand of free floating DNA. Rod, Spiral, Spherical shaped.
Eukaryotes	All animal and plant cells. These have membrane bound Structures.
Archea	Extremophiles. One-celled organisms that live in Extreme environments.
Cell wall	Plants, fungi, bacteria have cell walls. Thick, rigid outer Layer of the cell. For protection, and gives the cell Its shape.
Organelles	Membrane bound structures in animal and plant cells.
Nucleus	Has a nuclear membrane, contains chromosomes which Are hereditary material, in the chromosomes DNA is found. Control center of the cell – brain. Controls all cell activities.
Chromosomes	In the nucleus and contains hereditary material.
DNA	Deoxy-Ribo Nucleic Acid.
Energy Producing Organelles	
Chloroplasts:	Contain a green pigment called chlorophyll. Convert CO ₂ And water to O ₂ and sugar by using sunlight. Like a solar Cell.
Mitochondria	Energy factory in all plant and animal cells. Converts O ₂ And sugar to CO ₂ and water. Makes an energy molecule Called ATP (Adenosine Tri-Phosphate).

Cornell Notes Continued:

Manufacturing
Organelles

Ribosomes

To make protein. Float around in the cytoplasm and are
Are found on the surface of the Rough Endoplasmic
Reticulum.

Processing, Transporting
And Storing Organelles:

Endoplasmic Reticulum: Can be rough or smooth. Make proteins.

Golgi Bodies

Packages materials and sends
Them out to other parts of the cells: Packages of food for
Example. Packages of waste to be sent out of the cell.

Vacuole

Found in plant and animal cells. Are large in plant cells
Store food and water.

Recycling Organelles

Lysosomes

decompose dead or damaged parts of the cell by recycling
The nutrients.

The organization of the Organism: Many cells together that are the same cell type,
Make tissue. Many tissues working together, make organs;
And many organs working together make an organ system;
And many organ systems working together make the
Organism.

