

Life Science – Chapter One – Study Guide

Lesson One – Discovering Cells

Key Terms

Compound Microscope	Cell
Microscope	Magnification
Cell Theory	Resolution
Convex Lens	

Key Concepts

- Hook's contribution to science:
 - What? When? Where?
- Leeuwenhook's contribution to science:
 - What? When? Where?
- 3 Parts of Cell Theory
- Schliedenn and Schwann
- How does a light microscope work?

Lesson Two – Inside Cells

Key Terms

Organelle	Golgi Body
Cell Wall	Chloroplast
Cell Membrane	Vacuole
Nucleus	Lysosome
Chromatin	Cytoplasm
Endoplasmic Reticulum	Mitochondria
Ribosome	

Key Concepts

- Function of each of the organelles listed above.
- Difference between plant and animal cells
- Label a plant and animal cell diagram
- Significance of the nucleus and chromatin
- What do bacterial cells lack?

Lesson Three – Compounds in Cells

Key Terms

Element	Atom
Compound	Molecule
Organic Compound	Inorganic Compound
Carbohydrate	Protein
Amino acid	Enzyme
Lipid	Nucleic Acid
DNA	RNA

Key Concepts

- How compounds form
- Difference between an organic and inorganic compound
- How the listed compounds above aid cells.
- Importance of water to chemical reactions
- Significance of DNA and RNA.
- Affect of excess cholesterol

Lesson Four – The Cell in Its Environment

Key Terms

Selectively Permeable	Diffusion
Active Transport	Osmosis
Passive Transport	

Key Concepts

- Explain how materials move into and out of cells through the processes of osmosis and diffusion.
- Difference between active and passive transport
- Methods of active transport