

# 7<sup>th</sup> Grade Science Chapter 3 Cells Study Guide

You will have a test in class on 22-23 September 2014. Questions will be taken from the concepts/vocabulary in this study guide. You are encouraged to review your homework assignments #4, #5, and #6 on [www.guia.com/web](http://www.guia.com/web). All questions on the test will be taken from these homework assignments.

*This list goes in sequence from Section 1, 2, and 3 in your textbook.*

1. What is a cell?
2. Comparing cells – structure and function.
3. Types of cells: Eukaryotes, Prokaryotes, Archea.
4. Parts of Cells and what they do (their function): Cell Wall, Cell Membrane, Cytoplasm, Organelles, Nucleus (DNA, Nuclear membrane, chromosomes, nucleolus), Chloroplasts, Chlorophyll, Mitochondria, Ribosomes, Rough and Smooth Endoplasmic Reticulum, Golgi Bodies, Lysosomes.
5. Differences between plant and animal cells.
6. What is the structure of a Bacteria (Prokaryote) cell.
7. Cells, tissues, organs, organ systems, and the organism.
8. Compound Microscopes are what we are using in the lab.
9. Antonie van Leeuwenhoek.
10. Leeuwenhoek microscope.
11. Scanning Electron microscope.
12. Brightfield/Darkfield microscope.
13. How to multiply the power of the eyepiece lens and the objective lens.
14. The three parts of the cell theory.
15. What is a virus? What is a host cell?
16. How do viruses multiply?
17. What is an active virus and a latent virus?
18. How do viruses affect organisms?
19. What is a bacteriophage?
20. What is a vaccine?
21. Who developed the first vaccine and for what disease?
22. What is Gene therapy?

**Vocabulary:** cell membrane, cell wall, cytoplasm, organelle, nucleus, DNA, nucleus membrane, chromosomes, chloroplast, chlorophyll, mitochondria, ribosome, endoplasmic reticulum, golgi bodies, tissue, organ, organ system, Cell Theory, Virus, host cell, active virus, latent virus, bacteriophage, vaccine.