

Structures of Living Things
Chapter 3 Lesson 1 Study Guide (Updated)

1. cell – the basic unit of life; the size and shape of a cell determines its function
2. tissue – a group of similar cells working together at the same job
3. organ – a group of different tissues working together to do a certain job
4. organ system – different organs working together to do certain jobs
5. organism – any living things that can carry out its life activities on its own
6. microscope – a tool used to see the structure of cells
7. The Cell Theory
 - a. All living organisms are made of cells
 - b. Cells are the basic unit of function¹ and structure² of all living things
 - c. All cells come from previous cells
8. Function of all Living Things¹
 - a. nutrition – raw materials and energy that food gives living organisms to survive
 - b. respiration – energy is released from food; exhaling gives off carbon dioxide
 - c. excretion – the removal of wastes
 - d. response – the reaction of changes in living things surroundings
 - e. movement – animals' response to changes in surroundings; like getting out of the rain
 - f. growth – the increase in size or amount of material contained
 - g. reproduction – the process by which living things produces its own kind
9. Structure of Living Things²: Cells to Tissues to Organs to Organ Systems to Organisms

What determines a cell's function?

What does food give all living things?

What determines living things to increase in size?

Parts of a Cell – 6th Grade
Study Guide Chapter 3 Lesson 2

1. cell – the basic unit of life
2. mitochondrion – one of the rod-shaped structures in the cytoplasm that supplies the cell with energy, the power house, materials containing energy are package and secreted.
3. nucleus – the largest, most visible part of a cell, which has its own membrane and is the control center of a cell's activities
4. chromosome – a long strand in the nucleus that stores directions for cell activities
5. transport system – a system that aids transport between the nucleus and other parts of the cells
6. atom – the smallest particle that all matter are made up of
7. cell membrane – a cell's outer covering, which give the cell shape and helps control materials that move in and out of the cell
8. cell wall – the stiff covering located on the outside of the cell membrane of a plant cell
9. chloroplasts – green structures found in many cells of plant leaves and atoms
10. vacuole – a sac-like space in a cell's cytoplasm for storing materials such as food or waste
11. organelle – structures found inside the cell; examples: nucleus, mitochondrion, chloroplasts
12. carbon compound – carbon combined with other elements used for nutritious value
 - a. carbohydrates – sugars and starches that supply energy
 - b. lipids or fats – helps the body to grow and develop through cream, butter, oils, and nuts
 - c. proteins – helps cell growth and repair through meats, eggs, and dairy products
 - d. nucleic acid – carbon compounds that contain codes to build proteins
13. elements – substances that are made up of one kind of atom, for example: carbon
14. compounds – elements existing together in substances, for example: water
15. bacteria – one celled organism containing all the parts of a cell to function independently, like a plant cell it has a cell membrane and a cell wall