

# Chapter One

## Science Study Guide

### Vocabulary:

*Cell:* The smallest unit of a living thing - the building block of life

*Nucleus:* The control center for the cell

*Cytoplasm:* A gel-like liquid inside the cell membrane that contains the things that the cell needs to carry out its life processes

*Chloroplasts:* The special parts in plant cells that trap energy from sunlight which allows the plant to make its own food.

*Genus:* A group of closely related living things - The first part of an organism's scientific name

*Species:* A group of similar organisms that can mate and produce offspring that can also produce offspring

*Vertebrates:* Animals with backbones

*Invertebrates:* Animals that do not have a backbone

### Key Points:

- ◆ Groups of the same type of cell form a tissue.
- ◆ Plant cells have parts that animal cell do not. Plants have chloroplasts and cell walls.
- ◆ Fish, amphibians, reptiles, birds, and mammals are all classified as vertebrates.
- ◆ Clams, arthropods, mollusks, and worms are all classified as invertebrates.
- ◆ Scientists use microscopes to see and study the details of cells.
- ◆ Spiders are not classified as insects because they have eight legs and two main body parts. Insects have six legs and three main body parts.
- ◆ Vascular plants have a system of tubes that connect all the organs of the plant - the leaves, stems, and roots.
- ◆ Nonvascular plants do not have true roots, stems, or leaves.
- ◆ Adaptations are passed on from generation to generation and help an animal get food, protect itself, move, and reproduce.
- ◆ Some animals migrate in search of food or a place to reproduce.
- ◆ Hibernating animals conserve energy by slowing down their body functions and using stored body fat to get energy
- ◆ Some animals, like lion cubs, learn to get food by watching their parents hunt.