**Section 1: Living Things and the Environment**

**Key Terms:**

**Organism**: A Living Thing

**Habitat**: The environment that provides the things the organism needs to live, grow, and reproduce

**Biotic Factor**: The livings parts of a habitat (grass, plants, fruit, seeds, trees, animals)

**Abiotic Factor**: The non-living parts of a habitat (water, sunlight, oxygen, temperature, soil)

**Photosynthesis**: The process in which some organisms use water, sunlight, and carbon dioxide to make food.

**Species**: A group of organisms that are physically similar and can mate and produce offspring that can reproduce.

**Population**: All the members of one species in a particular area

**Community**: All the different populations that live together in an area

**Ecosystem**: The community of organisms that live in a particular area, along with non living surroundings

**Ecology**: The study of how living things interact with each other and with their environment

**Section 2: Studying Populations**

**Key terms:**

**Estimate**: An approximation of a number, based on reasonable assumptions

**Birth Rate**: The number of births in a population in a certain amount of time

**Death Rate**: The number of deaths in a population in a certain amount of time

**Immigration**: Moving into a population

**Emigration**: Moving out of a population

**Population Density**: Number of individuals in an area of a specific size

Population Density = Number of Individuals/Unit area

**Limiting Factor**: An environmental factor that causes a population to decrease (i.e., food, water, space, weather)

**Carrying Capacity**: The largest population that an area can support

**Section 3: Interactions Among Living Things**

**Key Terms**

**Natural Selection**: A process by which individuals that are better adapted to their environment are more likely to survive and reproduce than others of the same species.

**Adaptations**: A behavior or physical characteristic that allows an aorganism to survive or reproduce in its environment.

**Niche**: The role of an organism in its habitat, or how it makes it’s living.

**Competition**: The struggle between organisms to survive as they attempt to use the same limited resource

**Predation**: An interaction in which one organism kills another for food.

**Predator**: The organism that does the killing in a predation interaction.

**Prey**: An organism that is killed and eaten by another organism.

**Symbiosis**: A close relationship between two organisms of different species that benefits at least of the organisms.

**Mutualism**: A close relationship between organisms of two species in which both organisms benefit.

**Commensalism**: A relationship between two species in which one species benefits and the other is neither helped nor harmed.

**Parasitism**: A relationship in which one organism lives on or in a host and harms it.

**Parasite**: The organism that benefits by living on or in host in a parasitism interaction.

**Host**: The organism that a parasite or virus lives in or on.

**Section 4: Changes in Communities**

**Key terms:**

**Succession:** The series of predictable changes that occur in a community over time.

**Primary Succession**: The series of changes that occur in an area where no soil organisms exist.

**Pioneer Species**: The first species to populate an area.

**Secondary Succession**: The series of changes that occur in an area were the ecosystem has been disturbed, but where soil and organisms still exist.