Mr. Hoover's Ecology Final Study Sheet

Basic Ecology Terms

Ecology	The study of the relationships and interactions of living things with each other and nonliving things.
Population	A number of the same species living together in the same area.
Habitat	A place where an organism lives
Niche	An organism's job or role in an ecosystem. What it **does** and what it **needs**.
Biotic	The natural living parts of an ecosystem.
Abiotic	The natural non-living parts of an ecosystem.

Flow of Energy

Producer	Green plants that change sunlight into food.
Primary Consumer	An organism that must eat plant material to get the suns energy (Herbivore)
Secondary Consumer	An organism that must eat either producers or primary consumers to get the suns energy.
Carnivore	Organism that eats meat only
Herbivore	Organism that eats plants only
Omnivore	Organisms that can eat either plants or animals to survive.
Decomposers	Examples- bacteria, fungi (mushrooms), termites
Food Chains	Show the flow of **Energy** in an ecosystem
Food Web	A collection of food webs that show the flow of energy through a larger ecosystem.

Photosynthesis

Photosynthesis	Sunlight +Carbon Dioxide + Water = Sugar (Carbohydrates for food) and Oxygen
Chloroplasts	The green structures in plant cells where photosynthesis occurs.
Chlorophyll	The green pigment in plants that allows photosynthesis to occur.
Stomata	The openings in the leaf structure where gases enter and leave.
Veins	The structures in the plant where water flows in and sugar flows out of.

Adaptations

Physical Adaptations	Part of an organisms body that helps it to survive.
Behavioral Adaptations	An action or trick that an organism does that is passed down through mimicking.

Ecological Relationships

Predator-Prey	A predator will catch, kill, and eat its normal prey. Both species benefit.
Competition	Organisms compete for resources.
Symbiosis	A close relationship between 2 organisms where at least one benefits.
Commensalism	A form of symbiosis in which one organism benefits and the other is not affected
Mutualism	A form of symbiosis in which both organisms benefit
Parasitism	A form of symbiosis in which one organism benefits and the other is harmed.

Human Impact

Intentional Killing	Animals are hunted for their fur, teeth, feathers, or other body parts.
Destroying Habits	The place where an animal is adapted for is destroyed.
Deforestation	Cutting down forest to make room for farming or development.
Desertification	When farming animals over-graze and area of all plant life and increase the desert size.
Wetland Destruction	Wetlands are drained, filled in, or polluted.
Pollution	Adding human waste products to the environment (air, water, land)
Exotic Species	A non-native plant or animal that humans bring to a new area ant release into the ecosystem.
Accidental Killing	Organisms are killed by the actions of humans indirectly.

Climate Terms:

Climate	The 2 factors that make up climate are PRECIPTIATION & RAINFALL
Three factors that affect temperature	1. Latitude 2. Elevation 3. Ocean Currents
Latitude	The distance north or south of the equator
Elevation	The distance above sea level. The higher up the mountain the colder.
Ocean Currents	A river of warm or hot water flows around the oceans of the world. If the current comes from the equator it will bring warm air, if it comes from the poles it will bring cool air.
Two factors that Affect precipitation	1. Prevailing winds 2. Mountains
Prevailing Winds	Winds that blow more often from one direction.
Mountain ranges	Serve as a barrier to prevailing winds and can stop rainclouds from reaching an area.
Windward Side	The side of the mountain that gets the most rain and plant growth
Leeward Side	The Dry side of the mountain range
Polar Zone	Around the north pole, temperatures average below zero, very little precipitation
Temperate Zone	From 30-60 degrees latitude, mild climate, only zone with seasons.
Tropical Zone	Located near the equator, hot temperatures, and heavy rainfall in places.

Biomes

Biome	A place with a specific climate and plants and animals adapted to survive.
Arctic Tundra	Little precipitation, Very cold
Alpine Tundra	Located on mountain peaks, very cold, little precipitation
Tropical Rainforest	Usually located near the equator, heavy precipitation, warm temps, and most life.
Temperate Rainforest	Rainforest that is located in the temperate zone, heavy precipitation, mild –cold temps.
Tiaga (Coniferous Forest)	Animals know to hibernate for winter,
Deciduous Forest	Located in temperate zone, mild temps, seasons, trees that lose leaves in winter
Desert	Little precipitation, Hot during day, cold at night, very little life.
Grasslands (Savanna, Prairie, Steppe, Chaparral	Little precipitation can be warm or cold depending on climate zone.