Biology Ecology chapter

Food chain

- A food chain shows Who eats whom in an ecosystem
- It starts with producer
- Producers are the organisms that make their own food using sunlight example plant
- Biomass is the mass of living material in plants .Energy stored in an organism

Name the types of consumers

- Primary consumer, secondary consumer, tertiary consumer
- Energy is transferred from producers to primary consumers and then primary consumers to secondary consumers and then secondary consumers to tertiary consumers
- Dandelions - rabbits - fox
- Predators Eat Pray. pray populations affect Predator number and vice versa

The water cycle

- Continue recycling of water between land and atmosphere is called water cycle

Four stages of water recycling

- Evaporation , Transpiration , Condensation , Precipitation
- Water moves continuously on earth that means what it is recycled
- There are 4 main stages
- Evaporation, Sun heats water and water vapour also transpiration from plants
- Condensation means water vapour cools and go to the clouds
- Precipitation waterfalls as rain or snow
- Water drains to river sea and the cycle repeat

Carbon cycle

carbon is cycle through ecosystems

- Carbon is cycled between Air plants animals soil and fossil fuels
- Carbon is removed from the air by photosynthesis

How does carbon move through food chain

- Plant take carbon dioxide and make glucose and build carbohydrates fats and proteins
- animals eat plants and carbon moves into their bodies

How is carbon returned to the atmosphere

- respiration is by animals and plants and carbon dioxide is back to the air
- Dead organisms such as detritus feeders and microorganisms release carbon dioxide

- burning fossil fuels will also release the carbon dioxide
- carbon and energy constantly recycled

Biodiversity and human impact

- Biodiversity means variety of species in an ecosystem or earth

Why biodiversity is important

- It maintains ecosystem stability
- it supports food medicine and environment

Higher bio diversity means stable ecosystem and better environment

Threats to the biodiversity

- Human actions reduced biodiversity

such as deforestation, pollution, global warming

Global warming

- Global warming is earth heating due to increased greenhouse gases such as Methane and carbon dioxide

- Caused by rising greenhouse gases
- It traps the heat and warm the earth and there is a climate change
- Side Effects are sea level Rises and their floods

- species move or reducing numbers and biodiversity loss
- changes in migration pattern

Deforestation and land use

- Deforestation means cutting trees and then there is fewer habitats and less carbon dioxide is absorbed
- Peat bogs store carbon and burning carbon dioxide is released and there is global warming
- Land is used for farming housing and it reduces the habitats

Maintaining biodiversity

Programs

- Breeding programs protect endangered species such as pandas
- Habitat protection
- Prevent global warming by reducing the deforestation
- Reduce the waste

Conflict in maintaining biodiversity

- Cost of programs
- effect on local economy
- protecting food security

- development

Example of Predator prey cycle

Predator is an animal that hunts and eats other animal

pray is the animal that is hunted and eaten by the Predator

- **Fox is a predator that eats rabbit and rabbit is a prey**
- **If there is more grass so there will be more rabbits and there will be more foxes and then fewer rabbits and fever foxes**