Name_____

CASE

Presentation Notes

Presentation _____ Lesson 4.4

Notes from Presentation:

What is Ecology?

- The study of the interactions of organisms with one another & their environment
  - Interconnectedness; plants & animals need each other; & organisms need oxygen, water, nutrients, shelter, etc.

Biomes

- Large region with similar plants, animals, & other organisms adapted to the climate & other conditions
  - Consist of many similar ecosystems, EXAMPLES: aquatic, desert, grassland, taiga, temperate forest, tropical rainforest, & tundra

Ecosystems

- The interactions between the living things & nonliving things in a place
  - Plants, animals, and other organisms rely on each other & on the physical environment

Abiotic Ecosystem Components

- Nonliving factors & physical and chemical characteristics
  - EXAMPLE: air, water, land, soil nutrients, temperature, sunlight, & precipitation

Biotic Ecosystem Components

- Living organisms (Include: flora (plants), fauna (animals), & microorganisms)

Interactions of Organisms

- Food chain- single path of feeding relationships
- Food web- series of interrelated food chains

Producers and Consumers

- Producer- manufacture their own food, such as plants
- Consumer- obtain energy by eating other organisms
  - Herbivores eat plants, Carnivores eat animals, & Omnivores eat plants and animals

What is Energy?

- The ability to do work or cause changes to occur
  - Organisms need energy for life-sustaining processes

Trophic Levels

- An organism's position in the sequence of energy transfers (Producers- 1st level, Herbivores- 2nd level, Carnivores- 3rd level or higher)

Energy Flow

- As energy moves through the trophic levels, energy is lost
  - Energy to maintain body heat, movement, energy for body processes (digestion, etc.)
- Roughly 10% of transferred energy is stored in the next level

AFNR Reflection Page

List five key points that are important to remember from this presentation.

1. Biomes are regions that have similar plants and animals
2. The energy flow starts at the bottom of the trophic pyramid and goes to the top
3. Producers use photosynthesis as their food/ energy source
4. Food web is full of food chains
5. Ecology is the study of the interactions of organisms with one another & the environment

List three ideas or concepts that this new information has in common with previous things learned.

1. Each level of the trophic pyramid gets 10% of the energy from the layer below
2. Omnivores eat plants and animals
3. Food webs can get confusing with the different food chains

List questions or ideas that remain unclear about the information presented that should be asked for clarity at the appropriate time.
None