NAME _____ HR_____

Organization of the Environment Outline

Ecology

- The study of

- An Ecologist is a scientist

Ecology Involves

- Collecting _____ about _____ and their _____.
- Looking for _____.
- Seeking to _____ these _____.

Environmental Organization

- In Ecology, organisms and the environment are studied at various _____.
- Each level includes different factors.
- _____
- _____
- _____
- _____

Population

- A population includes all the _____ found in _____.
- The dandelion _____ in your lawn is an example of a _____.

Community

- A community includes all the _____.
- Your lawn has _____ of dandelions, grasses, earthworms, and other living things. These populations together make up a lawn _____.

Ecosystem

- A community (_____) and the

  _____ (air, water, soil)

  _____ and

  _____.

- Examples of _____ include your lawn, a balanced aquarium, ponds, vacant lots, woodlots, salt marshes, and forests.

Biosphere

- The biosphere is the _____.
- It is very large and includes many _____.

Stable Ecosystem Requirements

- An ecosystem can support itself and is _____ when the following

  _____ are met.

  - There must be a _____.
  - The _____ is the primary source of

    _____ for life on Earth.
  - There must be living organisms that can

    _____

    _____
  - There must be a

    _____

    _____

Ecosystem Components

Abiotic Factors

- The _____ parts of the _____.
- They directly affect the ability of organisms to _____ and _____.
- These factors vary from one place to another.

- _____ factors may act as _____.
- _____ determine the numbers and kinds of organisms that can _____.
    -
    -
    -
    -
    -
    -
    -

Biotic Factors

- All the _____ that directly or indirectly affect the _____.
- _____ factors interact with _____ and with the _____.
-
    - Any _____ that _____.
    - _____ are producers.
-
    - _____ eat _____ and/or _____.
    - All _____ are consumers.
-
    - _____ and _____.
    - _____ and _____ are examples of decomposers.

Ecosystem Characteristics

- _____ components combine to define the environmental _____ of the _____.
- _____ components interact with _____ to determine the success of _____.
- _____ components interact with _____ components to determine the overall _____.

Habitat

-
- An organism's _____ is determined by _____ and _____ factors.
- The factors an organism needs to survive determine _____.
- Example: An earthworm's habitat is _____.

Niche

-
- Includes _____, where it _____, _____, and _____ to its _____.
- Example: In a pond, a snail scrapes algae from the leaves and stems of plants.

Biome

- A _____ area described by its _____, _____, and _____.

- The _____ and _____ in a biome determines which _____ will grow there.
- Biomes may be _____ or _____ biomes.

Land (terrestrial) Biomes

- _____ and _____ groups are determined by the major _____ of the _____.
- They are sometimes modified by local _____ and _____ conditions.
- The presence or absence of _____ is a major _____.
- _____ conditions and _____ are affected by both latitude (_____) and altitude (_____).

Tundra (Polar)

-
- Animals:
- Plants:

Taiga (Coniferous Forest)

-
- Animals:
- Plants:

Temperate Deciduous Forest

-
- Animals:
- Plants:

Tropical Rain Forest

-
- Animals:
- Plants:

Grassland (Savanna)

-
- Animals:
- Plants:

Desert

-
- Animals:
- Plants:

Water (aquatic) Biomes

- Include _____ (_____) and _____ biomes.
- Make up the _____ on earth.
- More than _____ of the earth's surface is covered by _____, and more _____ live in _____ than live on _____.
- Water biomes are typically more _____ than land biomes.
- The temperature varies _____ because of the ability of water to _____.

Factors Affecting Water Biomes

-
-
-

Aquatic (water) Biomes

-
-

Marine (saltwater)

- _____
- Hold large quantities of _____
- Help to stabilize the earth's _____
- Contain a constant supply of _____ and

  _____
- Much of the _____ on earth is carried out by

  _____ near the surface of the oceans and coastal waters.
- Light penetrates through water to a depth of _____.

  _____ does not occur at greater depths.

Freshwater

- Less than _____ of the Earth's _____ is _____.
- _____, _____, _____, _____, and _____ will vary by:
  - Size
  - Speed of current
  - Temperature
  - Concentration of dissolved gasses and suspended particles
  - Rate of change