

Ecosystems 1.1 NOTES

I. Living things and the Environment

A. Habitats

1. Habitat-place where an organism lives that provides the things that an organism needs to live.

2. A single ecosystem has MANY habitats

B. Biotic Factors

1. Biotic Factors are the living part of an ecosystem- i.e. grass, worms, other organisms

C. Abiotic Factors

1. Abiotic Factors are non-living part of an ecosystem

a. Water- about 65% of your body is water!

1.1- **water** is a main ingredient used by plants to make "food" for themselves during photosynthesis.

1.2- **Photosynthesis** the process by which plants use Carbon Dioxide from the air and water to make glucose (sugar) and Oxygen. They use light energy to run the process.

b. Sunlight- light from the sun is the energy source to run a series of reactions called photosynthesis. This process makes food that the entire ecosystem depends on.

c. Oxygen- about 20% of air is Oxygen it is made as a waste product of photosynthesis

d. Temperature- temperature is one of the factors that decides what types of organisms can live

e. Soil- a mixture of rock fragments, nutrients, air, water and decaying remains of once living things. Soil is where most plants get the nutrients they need to live and grow.

D. Populations

1. **Species-** a group of organisms that are physically similar and can reproduce with each other

2. **Population-** all the members of a species that live in a particular area

E. Communities

1. **Communities-** all of the different populations that live and interact together in an area.