

Name: Key

Hour: \_\_\_\_\_

## Ecology Study Guide

### 20.1: Abiotic Factors

What are abiotic factors? the nonliving things in an ecosystem

Some examples of abiotic factors in the environment include (6): atmosphere,  
water, soil, sun, climate,  
temperature.

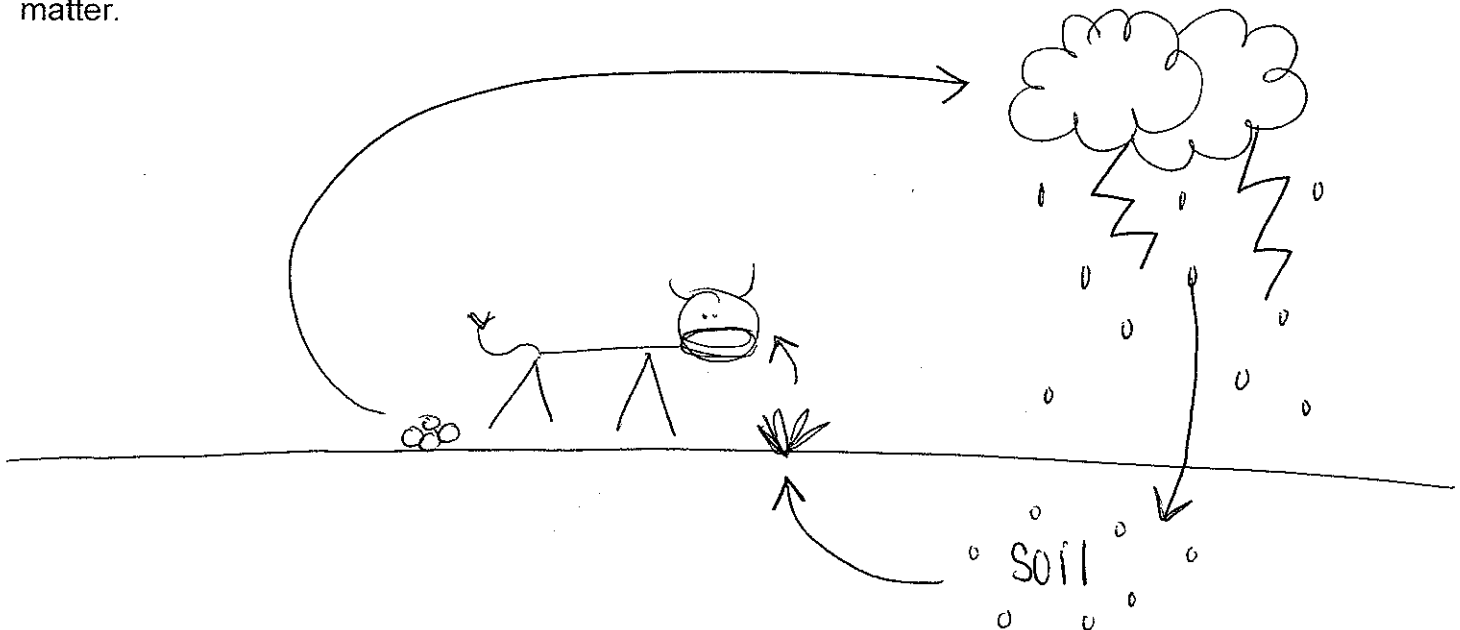
Why do we need abiotic factors? Why are they important? Abiotic factors provide the necessities for survival. Living things depend on nonliving things for energy/growth (sun, water...)

### 20.2: The Cycles of Matter

The four cycles of matter are:

1. Water Cycle
2. Nitrogen Cycle
3. Oxygen Cycle
4. Carbon Cycle

Draw a basic picture of the NITROGEN CYCLE below. Be sure to include arrows showing the flow of matter.



What are the main parts of the water cycle? (4) Evaporation,  
Condensation, Precipitation, Transpiration.

What is being exchanged during the oxygen cycle?

Oxygen and Carbon dioxide

How is carbon released into the air? Photosynthesis, Respiration,  
Combustion (cars, factories, burning fossil fuels)

How is carbon returned to the soil? fossil fuels, decomposition of  
plants and animals

### 21.3: Communities

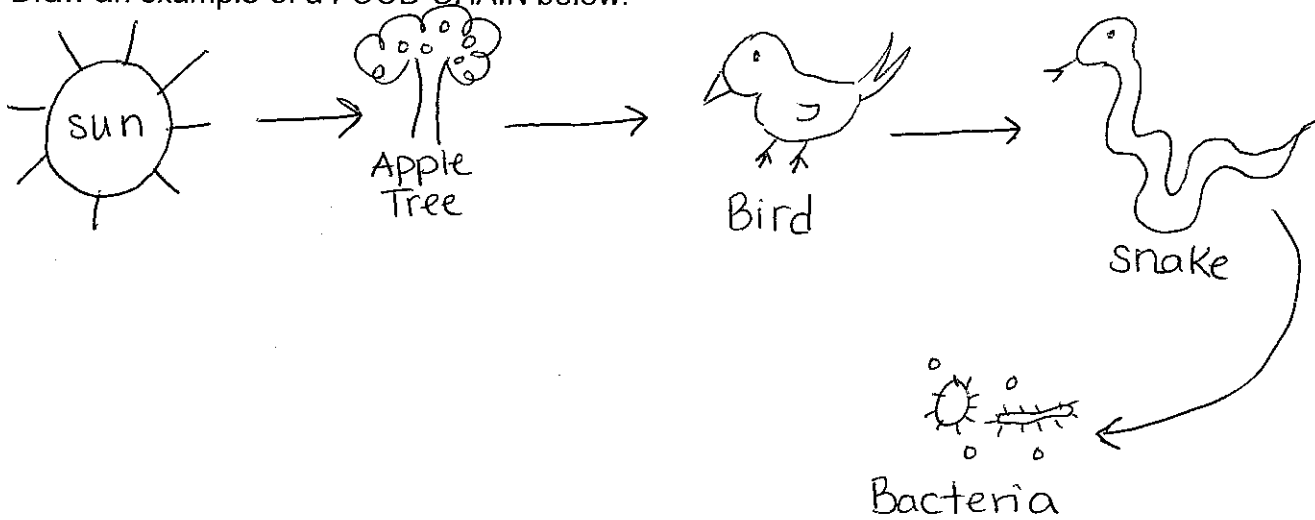
How is a producer different from a consumer? Producers are able to use the  
sunlight to make their own foods. Consumers must eat  
organisms to obtain energy.

Fill in the table below regarding the types of consumers:

Type of Consumer	What They Eat	Examples
Herbivore	Plants or Parts of plants	giraffe, rabbit, <del>dog</del> deer
Carnivore	Animals/meat	lion, eagle, wolf, shark
Omnivore	Both Plants and animals	birds, bear, monkey
Decomposer (Detritivore)	Dead/Decaying organisms	bacteria, fungi

What is the difference between a food chain and a food web? A food chain shows the flow of energy among organisms. A food web are many food chains put together.

Draw an example of a FOOD CHAIN below:



### 19.1: Land Biomes

What are the seven major land biomes? Tundra, Deciduous F., Desert, Taiga, Tropical RF., Temperate RF., Grassland.

Fill in the table below. Provide one detail about each of the major land biomes:

Land Biome	Fact Supporting Specific Biome
Desert	receives very little rain fall
Tundra	cold, dry, treeless
Grassland	grasses are the dominant plants
Deciduous F.	covers most of the united States
Taiga	consists of cone-bearing trees (pines)
Tropical RF.	warm and wet all year round
Temperate RF.	wide range regions (between tropics + polar)

### 19.2: Aquatic Ecosystems

The four main types of water/aquatic biomes are freshwater, Ocean, Wetlands, Estuaries.

