

Ch. 4 Jeopardy/Test Study Guide

PROPERTIES OF LIFE

List the 7 properties of living things.

cellular organization

homeostasis

metabolism

responsiveness

reproduction

heredity

growth

True or False? All organisms show the seven properties of living things at one or more stages of their lives. *True*

True or False? Nonliving things sometimes show properties of living things. *True*

WHAT IS AN ECOSYSTEM?(INTRO TO ECOLOGY)

Define:

population- *sum of all organisms in an area of the same species (can reproduce)*

community-*group of actual or potential interacting species living in the same place; a group of populations*

ecosystem-*community of living organisms interacting with the nonliving components of their environment*

biome-*a large community of plants and animals that occupy a distinct region*

biosphere-*the global sum of all ecosystems; the part of the earth and its atmosphere in which living organisms exist or that is capable of supporting life*

biotic-*living factors in an ecosystem*

abiotic-*nonliving factors in an ecosystem*

biodiversity-*a measure of the variety of organisms present in different ecosystems*

What two factors determine every biome on the planet? *water and temperature*

What three key ingredient do plants need for photosynthesis? *water, carbon dioxide, sunlight*

What biome? 300cm of rain a year, temperature of 20-30 degrees Celcius, high biodiversity
tropical rainforest

What biome? Little precipitation, below zero temperatures, low biodiversity *tundra*

What biome? Little precipitation, extremely high temperatures, low biodiversity *desert*

What are the three 'moderate' biomes? *temperate grasslands, temperate deciduous forests, taiga/coniferous forests*

ENERGY FLOW IN ECOSYSTEMS

Define trophic level. *The level assigned to an organism within an ecosystem based on where it gets its energy.*

An organism's habitat is like a _____, while the niche is like a _____.

- | | |
|---------------------|------------------------|
| a. <i>home; job</i> | c. <i>home; family</i> |
| b. <i>job; home</i> | d. <i>family; job</i> |

True or false: No energy is lost in each level as energy travels up a food chain. *False*

Global warming is most likely caused by the increase in _____. *carbon dioxide*

Define producer and describe where it fits in the food chain. *Plants that use energy from the sun to produce carbohydrates; occupy the lowest level of the food chain.*

Describe what makes producers and consumers different. *Producers can make their own energy source while consumers must rely on outside energy sources*

At what trophic level do herbivores reside? What are they? *2nd; consumers that eat plants and can break down cellulose into usable compounds*

At what trophic level do carnivores reside? What are they? *3rd; consumers that eat herbivores and other carnivores*

What is the name for an animal that eats both plants and animals? *omnivore*

True or false: In an ecosystem, there are more organisms at the top of the food chain than the bottom. *False*

CYCLING OF MATTER

How does water on earth re-enter the atmosphere? *through evaporation & transpiration*

What happens when water vapor in the atmosphere condenses? *precipitation*

What is the name of the process when water evaporates from plants? *transpiration*

Photosynthesis uses _____ and releases _____. *carbon dioxide, oxygen*

How might an increase in the burning of fossil fuels affect the carbon cycle? *puts too much carbon into the cycle that can't be broken down*