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|  | Topic/ Objective:Introduction to Principles of Ecology |
| Essential Question:  |
| Questions:  | **BASIC VOCABULARY:** Ecology: the study of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with each other and with the environmentAbiotic: Biotic:Ex. Ex. **Levels of Organization:** * + Species \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that can breed with one another
	+ Population: all the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in an area
	+ Community: all the difference species \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (fish + zebra mussels + microorganisms)
	+ Ecosystem: the community plus \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in an area (fish + zebra mussels + water + rope & wood + rainfall + wind)
	+ Ecoregion: recurring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ associated with characteristic combinations of soil and landforms that characterize that region
	+ Biome: large area that has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and particular species of plants and animals that live there (rainforest)
	+ Biosphere: the part of the earth that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the difference between a habitat and a niche? Things All Organisms Need to SurviveFWARPS**ENERGY FLOW:** Autotrophs (producers): capture energy from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and convert it into \_\_\_\_\_\_\_\_\_\_\_Heterotrophs (consumers): must \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Herbivores: Ex. Carnivores: Ex. Omnivores: Ex. Detritivores/ Decomposers: Ex. Draw an example of a food web in a lake ecosystem using the following organisms and show the *flow of energy* with arrows. Grass, frog, squirrel, fish, fox, coyote, spoted owl, snake, berries, mushroom |
| Questions:  | **FOOD CHAINS/FOOD WEBS:**Trophic Levels: *Producer---> Primary Consumer ---> Secondary Consumer --->**Tertiary Consumer***ECOLOGICAL PYRAMIDS**Energy Pyramid: shows how much is produced at each levelWhen energy is transferred to the next trophic level, typically only \_\_\_\_\_\_\_% of it is used to build new biomass, becoming stored energy (the rest if going to metabolic processes). Biomagnification: Increasing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a substance such as a toxic chemical, in the tissues of organisms at successively higher levels in a food chain. Write the story of the Bald Eagle.  |