

Environmental Science Chapter 4+5 Test Review Sheet

Students will know the definitions for, and be able to apply their knowledge of, the following terms as described in class:

ecosystem	biotic factor	abiotic factor	organism
species	population	community	habitat
natural selection	evolution	adaptation	artificial selection
resistance	bacteria	fungus	protist
gymnosperm	angiosperm	invertebrate	vertebrate
photosynthesis	producer	consumer	decomposer
cellular respiration	food chain	food web	trophic level
carbon cycle	nitrogen-fixing bacteria		phosphorus cycle
ecological succession	primary succession	secondary succession	pioneer species
climax community	carnassial pair	carnivore	herbivore
insectivore	omnivore	incisors	molars
canines	wild edible	annual	biennial
perennial	shade tolerant	shade intolerant	mutation
edge	nitrogen cycle		

Students will answer questions regarding the following concepts:

- What the parts of a habitat are and the concept of limiting factor.
- Describe the process of natural selection, who discovered the idea, and how it applies to mutation and evolution.
- Describe the six different kingdoms of living things that exist on our planet and their evolutionary development through time.
- Describe the importance of the members of each of these kingdoms in terms of how they contribute to our world.
- Describe the concept of resistance in terms of antibiotic and pesticide use.
- Describe /draw the flow of energy through our world starting with the sun.
- Describe the efficiency of energy transfers from one trophic level to the next.
- Describe /draw the carbon, nitrogen, and phosphorus cycles.
- Describe how humans affect each of these cycles.
- Students will know and be able to list Barry Commoners 4 principles of ecology.
- Students will describe in detail the different stages of secondary succession in Ohio using the information obtained in class.
- Describe the differences in structure between predators and prey.
- Describe the differences in structure between carnivores, herbivores, and omnivores in terms of their teeth and eye position.
- Describe the information needed to determine whether something is edible or not
- Describe the main climax forest type found in Ohio
- Describe the benefits and timing of forest/prairie fires