

Ecology: Food Chains and Food Webs

Term: <u>Autotroph</u>		
Describe: _____ _____		
Related Words: _____		
Draw:	My Understanding	
	Date: / /	Date: / /
	4	4
	3	3
	2	2
	1	1
Examples:		Non-examples:

Term: <u>Heterotroph</u>		
Describe: _____ _____		
Related Words: _____		
Draw:	My Understanding	
	Date: / /	Date: / /
	4	4
	3	3
	2	2
	1	1
Examples:		Non-examples:

	Autotroph or Heterotroph	Producer or Consumer	Where does its energy come from?	Examples:
Photoautotrophs				
Chemoautotrophs				
Herbivores				
Carnivores				
Omnivores				
Detritivores				
Decomposers				

Do each of the following NEATLY!

1. Color each producer green.
2. Color each herbivore blue.
3. Color each 1st level carnivore (a carnivore that eats a herbivore) brown
4. Color each 2nd level carnivore (a carnivore that eats a carnivore) red
5. With a highlighter draw arrows that represent the direction of energy flow. See Example: the Prairie Dog eats the Grass, the Snake eats the Prairie Dog, the Hawk eats the Snake.

A **food chain** is a diagram that shows the energy in an environment being passed from one organism to the next. A food chain will have one producer, one herbivore, one 1st level carnivore, and one 2nd level carnivore.

A **food web** is the interaction of several food chain in an ecosystem. A food web will have several producers, some herbivores, a few 1st level carnivores, and one 2nd level carnivore.

Questions:

1. What producer provides the energy that the hawk receives?
2. Give the best reason you can to explain why the plants are not growing close together.
3. How is the action of the gopher snake beneficial to the prairie dog population?
4. Fill in the blanks to create two different food chains from the above food web.

_____	_____	_____	_____
Producer	Herbivore	1st Level Carnivore	2nd Level Carnivore
_____	_____	_____	_____
Producer	Herbivore	1st Level Carnivore	2nd Level Carnivore

5. What would happen in this ecosystem if all of the producers were destroyed?
6. What would happen in this ecosystem if all of the hawks and owls were destroyed?
7. How would a change in the water cycle affect this ecosystem?