

Trophic Levels & The Energy Pyramid

Task:

Create an energy pyramid to show the flow of energy through an ecosystem.

Materials:

Ellison die pattern of pyramid
Colored pencils

Food web poster Tape or
glue

Scissors
Text book

Procedure:

1. Cut out the pyramid pattern
2. Construct the pyramid by folding along the dotted lines.
DO NOT TAPE OR GLUE YET!
3. Divide each side of the pyramid into 4 trophic levels.

IMPORTANT!! Use GREEN for the lowest level, RED for the 2nd level, YELLOW for the 3rd level; ORANGE for the top level on all 3 sides

4. Label the levels on one of the side with the following: **producer, first level consumers, second level consumers, third level consumers**
5. Label the second side with: **primary producers, primary consumers, secondary consumers, and tertiary consumers**
6. Label the third side of the pyramid with : **autotrophs, herbivores, carnivores, and omnivores**
7. Label the fourth side with **the names of plants and animals** found in the desert food web in the front of the class
8. Write your first and last name in the square portion (the bottom) of your pyramid
9. Fold and glue your pyramid together.

Answer the following questions

1. What are the levels of an energy pyramid called? _____
2. Did the amount of energy decrease or increase at each succeeding level?
_____ How does the pyramid demonstrate this? _____

3. What is the source of energy for all ecological pyramids? _____
4. What is another name for all animals in the 2nd, 3rd, and top levels of the pyramid? (*hint they do not make their own food*)

5. On the back of this sheet draw a pyramid (a triangle) and divide it into four levels. Think of another ecosystem, either terrestrial or aquatic, and fill in the names of plants and animals that would be found in that ecosystem at the various trophic levels.
6. Label the levels of your pyramid (#5 above) autotrophs, heterotrophs, producers, primary consumer, secondary consumer, tertiary consumer.