

28. BUILDING AN ENERGY PYRAMID VOCABULARY

Introduction

To fully understand associations within a community, the relationships among organisms using food and energy should be introduced.

An energy pyramid is defined as energy moving from the Sun, sustaining life on this planet, used by plants and animals, passed on and lost to the atmosphere. An energy pyramid is made up of producers, organisms that make their own food, and consumers, animals that cannot make their own food and must eat plants and other animals.

This activity will provide students with the opportunity to identify the vocabulary of the components of an energy pyramid and then to apply that information by constructing an energy pyramid.

Objective

The student will identify and define the parts of an energy pyramid and construct a diagram showing the positions of these parts in a typical energy pyramid.

Materials

Student Worksheet 28

Pen/pencil

Trade books or texts to locate meanings of words

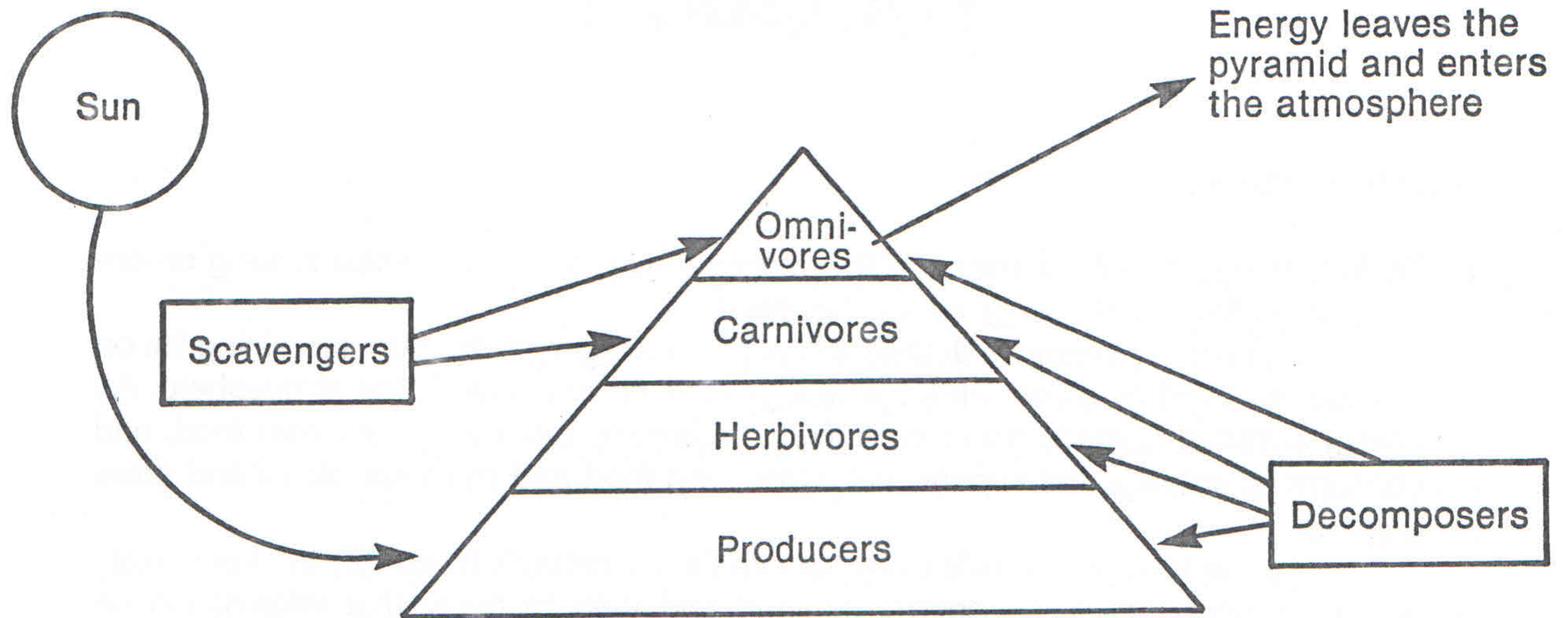
Scissors

Glue

Construction paper

Teacher Instructions

1. Distribute Student Worksheet 28. Students will use available texts, trade books or dictionaries to find the meanings of the words on their worksheets. Encourage them to put the meaning into their own words.
2. Students should follow the instructions on Student Worksheet 28.
3. Discuss the position outside the pyramid of decomposers, scavengers, and the sun. Have students draw arrows indicating the transfer of energy from decomposers, scavengers and the sun to the energy pyramid.



4. As an extension of this activity, solicit ideas from your students as to specific plants and/or animals that would fit at each level of the energy pyramid. You could draw these suggestions on the chalkboard, providing an introduction to the next activities (Activities 29 and 30, which follow, provide more specific information about these concepts).

Definitions for Energy Pyramid

Scavenger: an animal that feeds on dead animals; a consumer.

Decomposer: a microbe that causes the decay or breakdown of dead plants and animals.

Sun: the star that gives our planet light and heat necessary in the process of photosynthesis.

Omnivore: an animal that consumes both plant and animal materials.

Carnivore: an animal that eats other animals.

Herbivore: an animal that eats only plants.

Producer: any organism that makes its own food.

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Using the shapes on the next page:

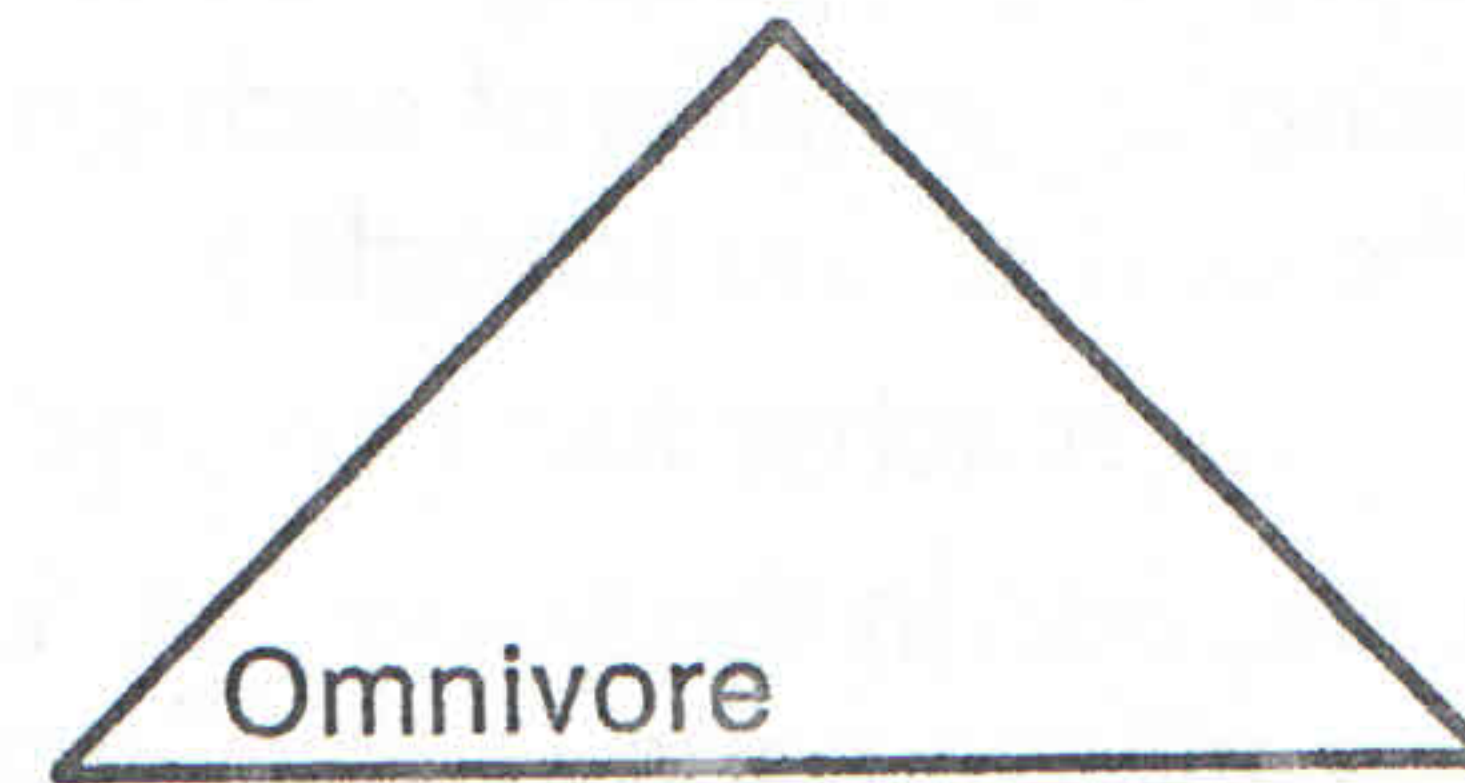
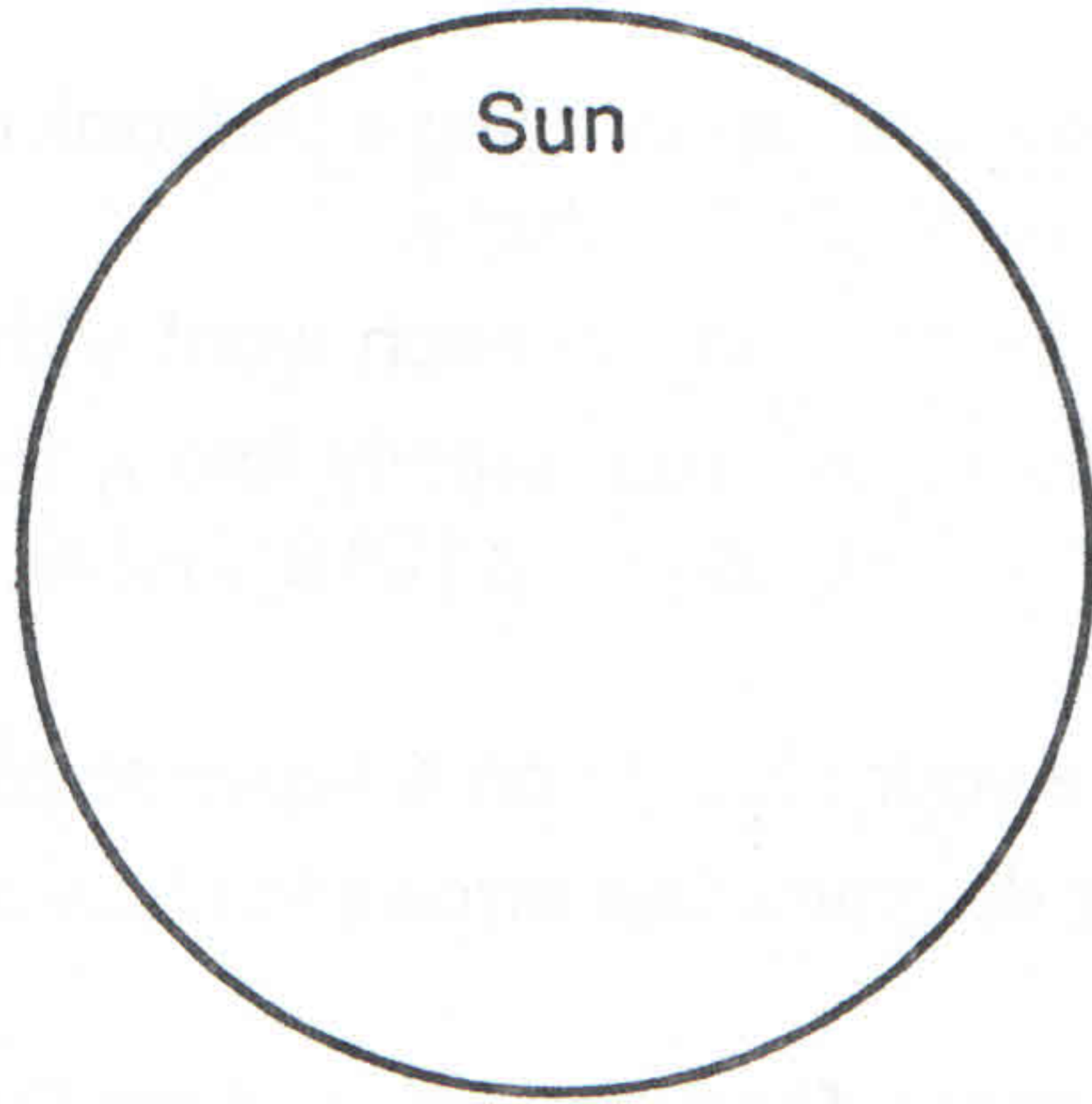
1. Find the meaning of each word in the shapes on your worksheet using a textbook or some other reference material. Write the meaning of the word inside the shape.
2. Cut out each shape. Make sure you understand the meaning of each word within the shape.
3. By using the meanings of the words and the information you already know, form a triangle showing the position of each group in a food chain in a community. (Clue: Not all of the shapes will be part of the triangle.)
4. After your teacher has checked your choices, glue your triangle on a separate piece of paper.
5. Glue the Sun in the upper left hand corner of your diagram. Use arrows to show how the Sun's energy affects parts of the energy pyramid.
6. On the right side of the triangle, glue the decomposer. Draw arrows to show the parts of the pyramid these organisms affect.
7. On the left side of your diagram, glue the scavenger. Again draw arrows to define the parts of an energy pyramid affected by scavengers.

Name _____

Date _____

Scavenger

Decomposer



Carnivore

Herbivore

Producer