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Date: \_\_\_\_\_

Unit II  
Ecology  
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# II

## Energy Flow Through an Ecosystem

Look at the food web with your group. Then answer the following questions.

- 1. For each of the 12 species in the food web, label them herbivore, carnivore, omnivore, producer or decomposer.**

Moss Campion \_\_\_\_\_

Lemming \_\_\_\_\_

Willow Ptarmigan \_\_\_\_\_

Horned Lark \_\_\_\_\_

Mountain Cranberry \_\_\_\_\_

Dwarf Willow \_\_\_\_\_

Arctic Fox \_\_\_\_\_

Mosquito \_\_\_\_\_

Snowy Owl \_\_\_\_\_

Grizzly Bear \_\_\_\_\_

Long-tailed Jaeger \_\_\_\_\_

Carribou \_\_\_\_\_

- 2. Each color arrow used in the food web represents one of the following: producer to first order consumer, first order to second order consumer, second order to higher level consumer, or all consumers and producers to decomposers. What does each color arrow represent?**

Red/Orange Arrow \_\_\_\_\_

Green Arrow \_\_\_\_\_

Pink Arrow \_\_\_\_\_

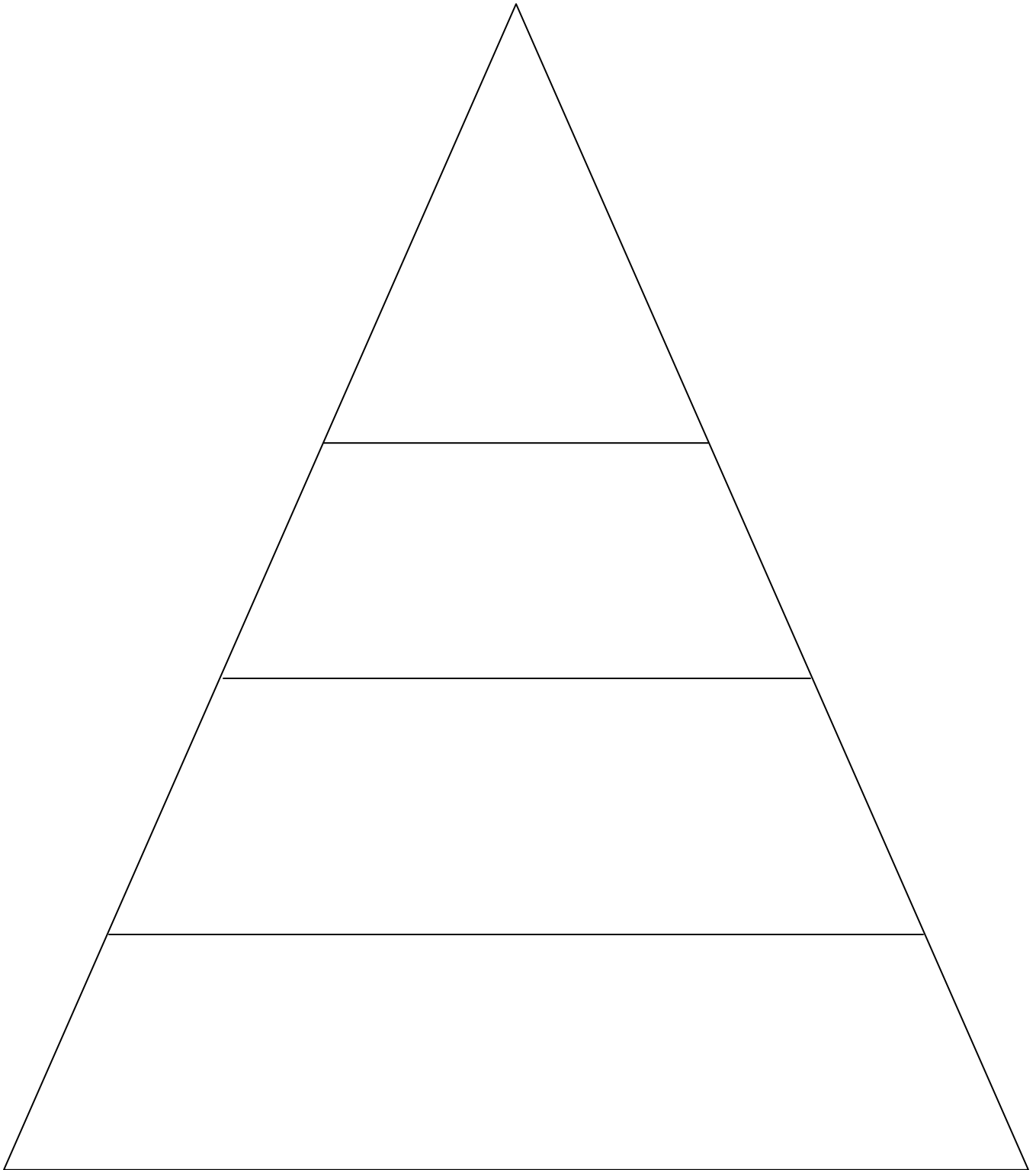
Yellow Arrow \_\_\_\_\_

- 3. Who are the top consumers in this food web?**

\_\_\_\_\_  
\_\_\_\_\_

Unit I – Biology – The Nature of Science – Observations

4. Now place each of the species from the food web on the appropriate trophic level on the energy pyramid below.



## Unit I – Biology – The Nature of Science – Observations

### **Critical Thinking Questions**

The following questions are typical constructed response questions like what you'll see on a test. Answer all of the questions in complete sentences.

1. What is the difference between the habitat and the niche of a species?
2. Why is it difficult to define the human habitat?
3. Distinguish between a food chain and a food web.
4. A bumper sticker asks: "Have you thanked a green plant today?" Give two reasons plants should be appreciated.
5. Explain why there are fewer lions than mice in an African ecosystem that normally supports both types of animals.

Unit I – Biology – The Nature of Science – Observations

