

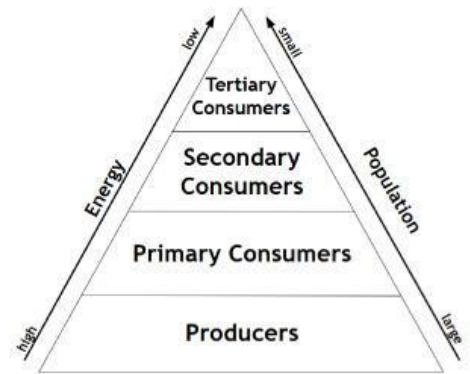
Pyramid Model Practice

Instructions: Use the images provided to answer the prompts. Use your notes as needed for assistance.

Background: Energy Pyramids show the movement of energy between trophic levels. As energy is passed from one trophic level to the next, 90% of the energy is lost as heat to the atmosphere and only 10% of the energy is actually available for the organisms occupying the next trophic level.

1. Use the model shown to indicate the name of each trophic level given.

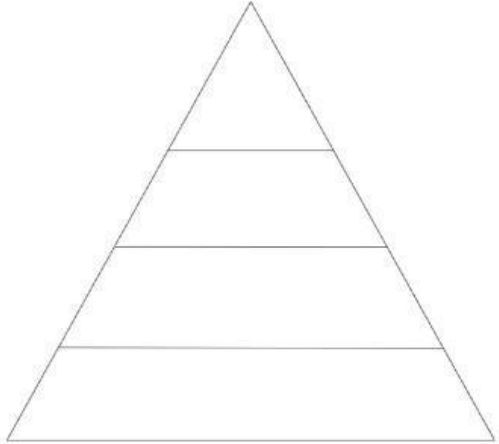
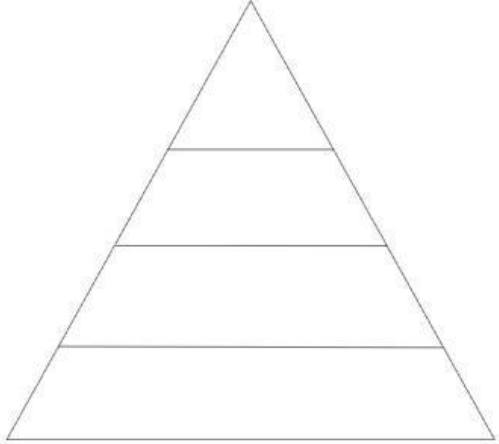
- a. 1st trophic level: _____
- b. 2nd trophic level: _____
- c. 3rd trophic level: _____
- d. 4th trophic level: _____



2. Place the organisms in each food change into the proper trophic level in the energy pyramid provided.

a. Acorn → Squirrel → Crow → Coyote	An empty energy pyramid diagram with four horizontal levels, identical in structure to the one in the background image.
b. Phytoplankton → Shrimp → Snapper → Shark	An empty energy pyramid diagram with four horizontal levels, identical in structure to the one in the background image.

3. Only _____ of energy available at each trophic level moves on to the next level.
4. _____ of the energy available at each trophic level is lost as _____ to the atmosphere.
5. Read the prompt and complete each pyramid as necessary.

a. Acorn → Squirrel → Crow → Coyote At the 1st trophic level, 1,000 kcal of energy is available. At the 2nd trophic level, 100 kcal is available. At the 3rd trophic level, 10 kcal is available. How much energy is available for tertiary consumers?	
b. Phytoplankton → Shrimp → Snapper → Shark At the 1st trophic level, 2,500 kcal of energy is available. At the 4th trophic level, 2.5 kcal of energy is available. How much energy is available at the remaining levels?	
c. Sunflower → Blue Jay → Garter Snake → Bald Eagle At the secondary consumer level, 50 kcal of energy is available. How much energy is available at the remaining levels?	