

Pyramid Model Practice

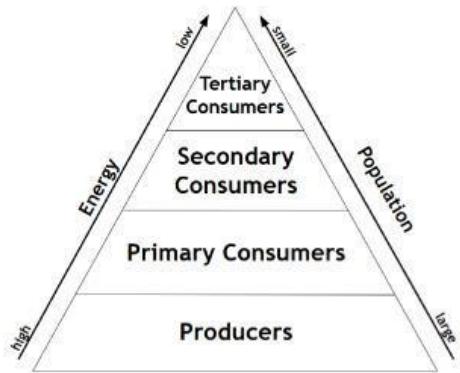
Instructions: Use the images provided to answer the prompts. Use your notes as needed for assistance.

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.

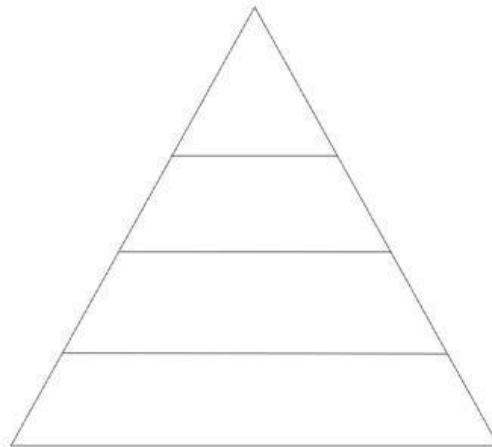
1. Use the model shown to indicate the name of each trophic level given.

- 1st trophic level: _____
- 2nd trophic level: _____
- 3rd trophic level: _____
- 4th trophic level: _____

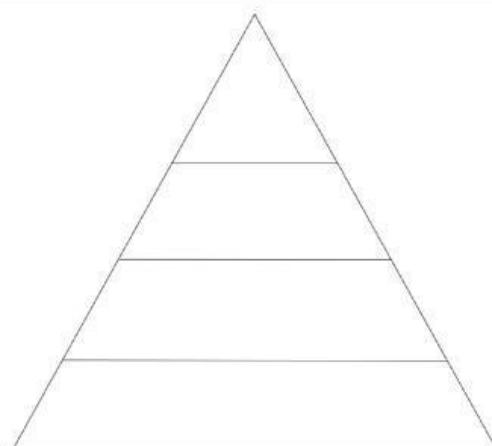
2. Place the organisms in each food chain into the proper trophic level in the energy pyramid provided.



a. Acorn → Squirrel → Crow → Coyote



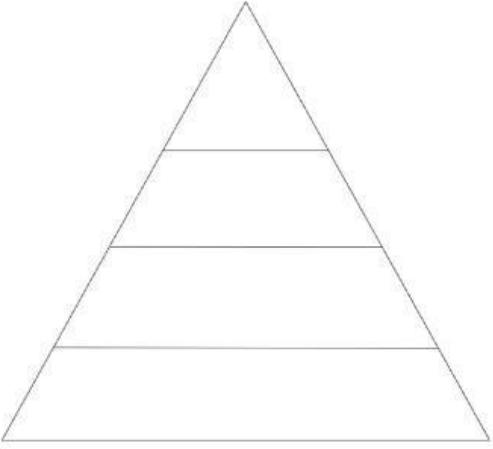
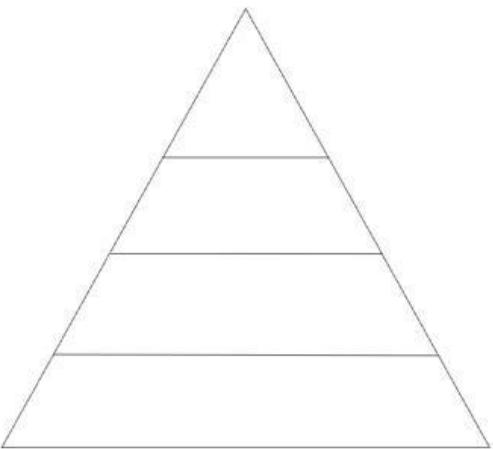
b. Phytoplankton → Shrimp → Snapper → Shark



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.

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