NAME_____DATE_____PERIOD___

# Great Salt Lake Food Web

Use http://learn.genetics.utah.edu/content/gsl/foodweb/ to complete the WebQuest.

1. Read the introductory paragraph. Why is the Great Salt Lake food web relatively simple?

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2. Click on the information link for birds.
   a. What are the main food sources for birds that visit the Great Salt Lake?

   _____

   b. Are birds producers or consumers? Explain.

   _____

   c. Why do high-level consumers prey on smaller birds at the Great Salt Lake?

   _____

3. Click on the information link for brine flies.
   a. How have brine flies adapted to live in the Great Salt Lake?

   _____

   _____

   b. Are brine flies producers or consumers? Explain.

   _____

   _____

   c. What is the relationship between decomposers and the brine flies? How do these decomposers help the Great Salt Lake ecosystem?

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4. Click on the information link for bottom-dwelling microbes.
   a. Are these microbes producers or consumers? Explain.

   _____

   _____

   b. How does the energy from these microbes get transferred into the Great Salt Lake food web?

   _____

5. Click on the information link for brine shrimp.
   a. Are brine shrimp producers or consumers? Explain.

   _____

   b. Why are the brine shrimp so important in the Great Salt Lake food web?

   _____

6. Click on the information link for free-floating microbes.
   a. Are these microbes producers or consumers? Explain.

   _____

b. How are the populations of the algae *Dunaliella* and brine shrimp related?

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Study the diagram of the food web and place each organism into the correct category in the table below. Explain how the organisms fit into that category.

| Type of Organism | Explanation |
|---|---|
| 7. Producers | |
| 8. Primary Consumers | |
| 9. Secondary Consumers | |

10. Read the section on how energy is transferred up the food pyramid.
    a. How is the sun's energy lost as it travels up the food pyramid?

    _____

    _____

    b. Why does the total biomass decrease from producers to secondary consumers?

    _____

    _____

11. Draw a food web using the following organisms that live in the Great Salt Lake. Label the food web with explanations of how each organism receives and transfers energy. Be sure to use the appropriate arrows too!

**BRINE SHRIMP** **BRINE FLIES** **SNOWY PLOVER** **CYANOBACTERIA**
**COYOTE** **PLANKTON** **PEREGRINE FALCON** **WILSON'S PHALAROPE**

12. What role do decomposers play in the food web above?

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