From Tiny to Tremendous Food Web Activity

Procedure:

- 1. Use the organism cards to build connections between organisms. The front of the card has the name of the organism and a picture of the organism. The Back of the card has information about what the organism eats and/or is eaten by.
- 2. Begin with the different types of phytoplankton because they use the Sun's energy to make food. Place the phytoplankton card near the bottom of your lab desk. Place the sun card near the phytoplankton, and point the arrow from the Sun to the phytoplankton to show that the energy is transferred from the Sun to the phytoplankton.
- 3. Read through the cards and determine which consumers eat the phytoplankton. This means that these organisms are getting energy from the phytoplankton. Place these cards on your lab station above the phytoplankton.
- 4. Continue to add different cards to finish out the food web.
- 5. On a piece of binder paper write the names and draw a sketch of the organisms that are in your food web. Connect the organisms with arrows. Remember the arrows show the direction in which energy flows. The arrows should flow from the sun to the phytoplankton and on through the food web. Remember organisms in a food web are interconnected. There may be one or many arrows connected to a single organism.
- 6. Use your diagrams and cards to answer the following questions.
- 7. Once you are finished, please put the cards back into the containers so that they can be used by another class. Thanks.

****Answer the Questions on Your Binder Paper****

Questions:

1. What is the energy source for this food web?

- 2. Fishermen often believe that they compete with seals. Why do they believe this to be true?
- 3. There is a growing concern that some fish species are being 'overfished'. Overfishing means that fishermen are catching too many of a fish species; the species does not have time to replenish itself. For example, if fishermen catch too many young fish before they reproduce, the species will not be able to sustain itself.

By looking at the food web predict what would happen if herring were overfished.

4. Is this a complete food web? Why or why not?

5. What is missing from the diagram for it to be considered an ecosystem?