## Energy Flow Activity

1. What do the beans represent?
2. Why did the plankton end up with the most beans?
3. What does the supply jar represent?
4. What do we call organisms that get their energy from the Sun?
5. What is another term we use for them?
6. What do we call organisms that eat producers?
7. Since the above organisms are the first of this group what term is added to "consumer" to represent "first"?
8. What do we call organisms that eat primary consumers?
9. What do we call organisms that eat secondary consumers?
10. What do we call these eating relationships?
11. Draw a food chain below, using arrows to show the direction the energy (beans) flowed:
12. What happened to the amount of beans as it traveled through the food chain?
13. When the simulation began there were a lot more plankton and shrimp than cod fish and dolphins, yet the fewer cod fish and dolphins ended up with less beans than the plankton and cod fish. What accounts for this loss in beans, as they travel up the food chain?
14.What did the energy loss jar represent?
14. Turn your graph on its side. If there was an identical mirror image graph sitting next to your graph, what shape would be created?
15. Ecologist usually show food chains as a pyramid. Why might this be useful?
16. Place the names of the organisms in the food chain in the first pyramid.
17. Write the terms: producer, primary consumer, secondary consumer, and tertiary consumer in the second pyramid.
18. Write the total number of beans in the third pyramid.


Energy "Beans" in a Marine Food Chain


