




## Into the Web: Plastic Pollution in the Pacific Ocean



A. In Google Earth, go to the Search Panel under the "Fly to" tab.

B. Type your school's name or address and hit search 

C. Click "**Add Placemark**"  on the tool bar.

D. **Name** your placemark with the name of your school.

E. Use the Navigation Controls to "zoom out" until you can see the ocean.

F. Use the Ruler tool  to **measure the distance** from your school to the ocean.



1) **What is the distance from your school to the Ocean?**

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2) **What evidence do you see of how water running downhill has shaped the landscape in your area? Draw a map below that shows the topographical features indicating erosion and deposition of sediment.**



3) **Along with sediment, what else might be transported to the ocean by water flowing downhill from your area? Make a list.**

Natural

Human-made

1.

1.


2.

2.

3.

3.




G. Find the North Pacific Ocean. The small blue sailboats  show the voyage of a research vessel carrying scientists who are studying plastic pollution in the Pacific Ocean.

H. Follow the voyage by clicking on the sailboats to see what the scientists found along the way.



Most plastic debris enters the ocean directly from land, flushed out to sea with rainwater. Powered by energy from the sun, ocean currents are constantly on the move. This means that objects that float continue to travel once they reach the ocean. The plastic debris collected by the scientists aboard ORV Alguita may have already traveled a long way.



4) List 3 pieces of plastic debris the scientists collected and measure  the minimum distance that the plastic could have traveled from land.

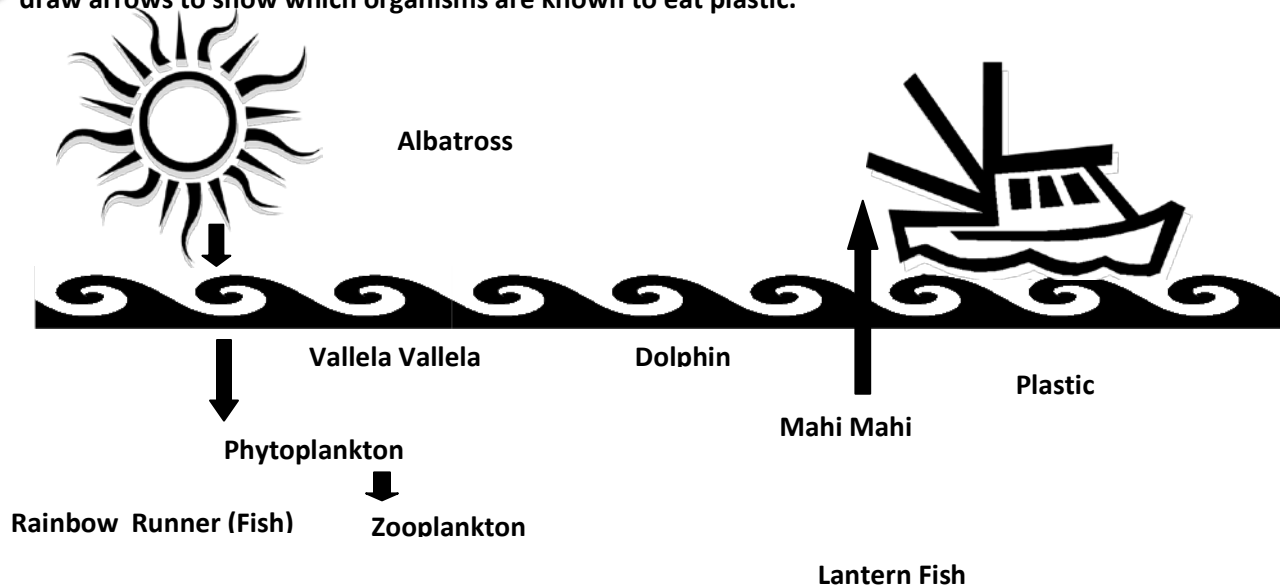
Plastic (description)	Minimum distance from land
1)	
2)	
3)	



Energy enters the marine ecosystem through sunlight which is transferred by phytoplankton into chemical energy through photosynthesis. This energy is then passed from organism to organism through the food web. Plastic also enters the food web as animals mistake it for food.



5) Using the photographs and information provided by the scientists on the research vessel, draw the organisms below and the food they eat. Draw arrows to show how energy flows through the food web. Also, draw arrows to show which organisms are known to eat plastic.



6) What negative effects might eating plastic have on an organism?



7) What is one thing you could do to make sure that you don't contribute plastic pollution to the ocean food web?