

Title: Nike Shoes Wash Up

Introduction: From the reading selection, you learned that ships in the ocean occasionally spill large numbers of objects into the ocean. These objects later wash up on beaches. In this activity, you will use the location of Nike shoes that have washed up on beaches to discover how currents travel in the Pacific Ocean. Cowabunga!



Procedures:

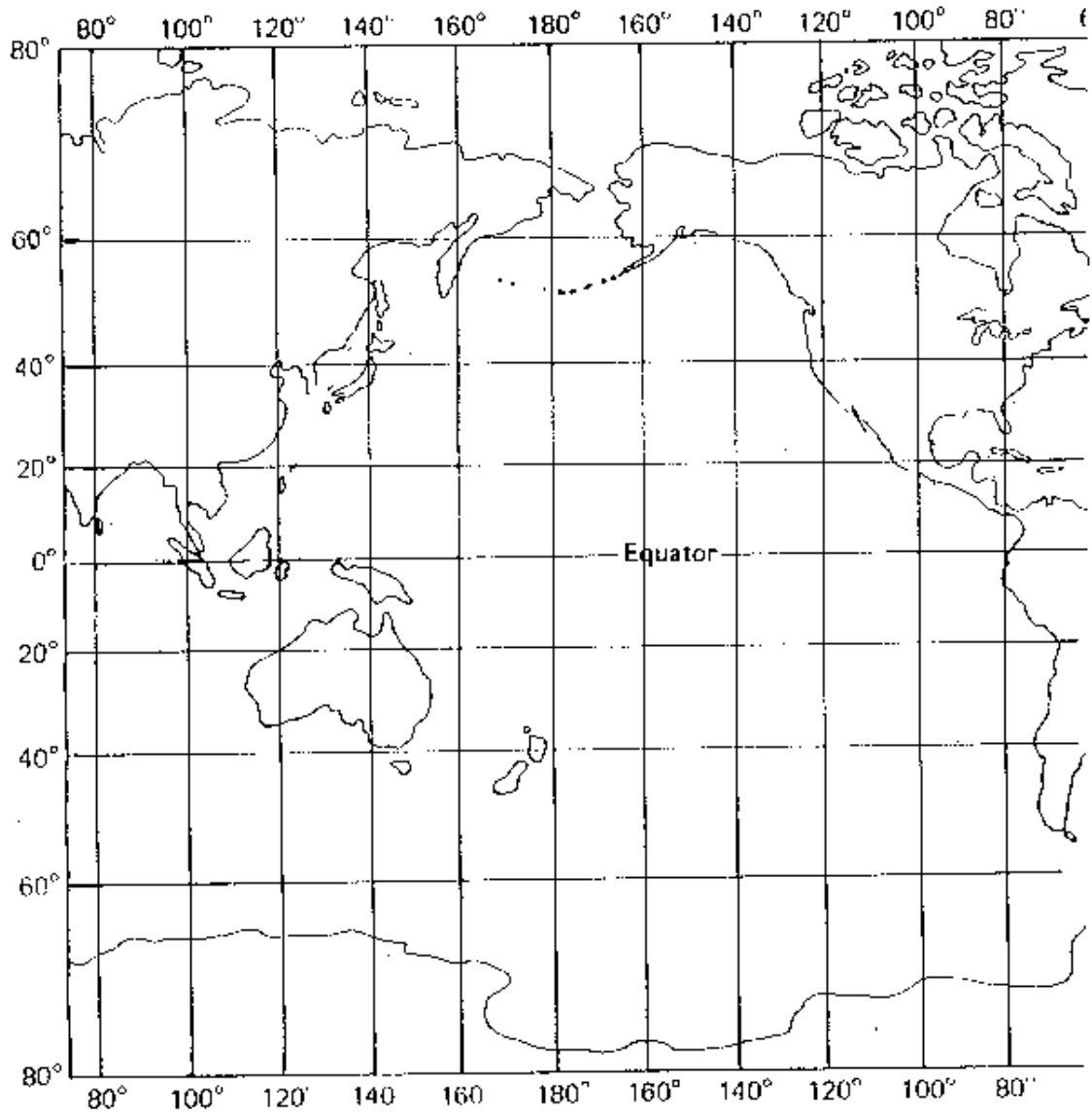
1. Use the data provided to mark the location of each “find” on the map provided. Use the number of the data point to label the location.
2. When you have placed all the numbers on the map, draw in the currents of the Pacific Ocean that would explain the movement of the shoes. Currents flow on the oceans surface like a river does on land.
3. Check your work with the map your teacher provides.
4. Answer the analysis questions to finish.

Data:

Spill #	What was recovered:	Latitude	Longitude
1	Shoes spill, May 27, 1990	48 N	161 W
2	200 recovered, Nov. 1990	56 N	134 W
3	100 recovered, Feb 7., 1991	53 N	129 W
4	200 recovered, Feb. 27.1991	47 N	125 W
5	250 recovered, Mar. 26, 1991	45 N	123 W
6	150 recovered, April 4, 1991	42 N	124 W
7	200 recovered May 9-10, 1991	40 N	124 W
8	200 recovered, May 18, 1991	39 N	123 W
9	Several recovered, Jan. 1993	19 N	155 W
10	Several recovered, Jan. 1994	32 N	132 E
11	Several recovered, April, 1996	54 N	133 W

Name _____ Period _____

THE NIKE SHOE INVESTIGATION
Map of the Pacific Ocean



Analysis:

1. How do currents move?
2. Describe the overall pattern of current flow in the Northern Pacific Ocean:
3. How close was your prediction based on the shoes to the accepted map of current flow provided by your teacher?
4. Why were the Nike shoes such a good marker of water movement?
5. Ocean currents move warm and cold water around the planet, helping to maintain a more constant temperature. Which currents would you expect to carry cold water?

Conclusion: