

## Horizontal Water Movement Using Drifters

**Objective:** Students will analyze horizontal water movement using drifters.



### Materials

- Access to water
- Method of marking off given distance (e.g. on land, pier, or boat)
- Bottle drifters with string attached (e.g. Pop bottle filled with sand so that the bottle floats just below the surface of the water)
- Student worksheets
- Timing device

### Procedure

1. Measure a known distance along a stationary location (e.g. shoreline, anchored boat). Select a starting point and mark it as point A. Measure a known distance along a parallel axis to the water to point B (should be at least 15 meters). Record distance.
2. Drop bottle drifter with attached string in the water at Point A.
3. Use timing device to record time it takes for the bottle to move to point B.
4. Use the worksheet to determine the speed of the current.

### Drifter Track Data

**Station:**

**Team:**

**Date:**

Latitude (°N)	Longitude (°W)	Time Interval (minutes)	Distance (m)	Speed (m/sec)	Direction