Longshore Drift Field Study

PURPOSE

The aims of this project are to:

a) Discover if longshore drift is consistent in direction and speed along a straight stretch of beach when measured at 15 m intervals at the same time.

b) Find out if longshore drift is consistent at different distances from, the shore.

c) Manipulate data in graphical form.

d) Estimate the positions of rip currents and describe some of their effects.

e) Estimate if the longshore drift changes before and after high and low tide (if you have time).

MATERIALS

A straight stretch of beach

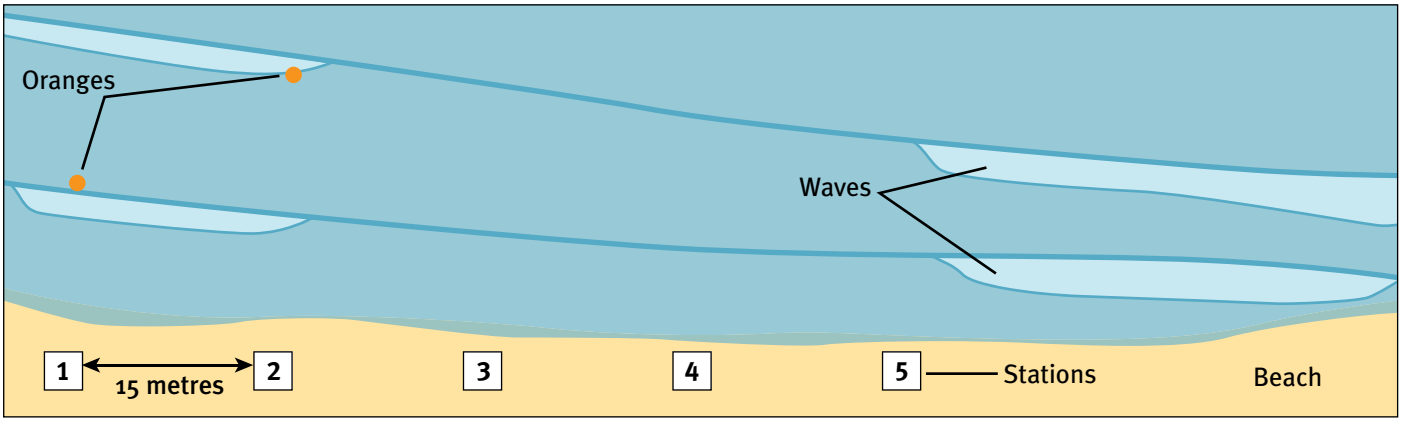
Two oranges

Data sheet, pencil, clipboard

Watch with second hand

INSTRUCTIONS

1. Pace out 5 stations, 15 metres apart on the beach
2. You are going to study longshore drift in close and out far. Decide which partner is going to throw the orange far and which close.
3. At a pre-arranged signal, such as a whistle, look to your teacher. At the second signal, and it must be emphasised pre-arranged, you cast your oranges into the sea and the timekeeper starts the watch.
4. You then follow your oranges and any variations. If the orange comes in, you should throw it out again.
5. After one minute the timekeeper signals and you are to mark the position of your orange in the sand opposite where the orange is. After two, three, four and five minutes, recording data accurately in the tables provided.
6. Fill in the *Longshore Drift Data Sheet* and write a short report on your results.



Longshore Drift Data Sheet

Name: _____ Date: _____

Team Station: _____ Rip: yes/no

Wind Speed: _____ Wind Direction: _____

Surf Height: _____ Ocean Substrate Offshore: _____

Short Throw

Minutes	Drift Direction	Distance

Long Throw

Minutes	Drift Direction	Distance

Observations _____

_____

_____

_____

Observations _____

_____

_____

_____

Graph your findings: