

# Visit A Stream

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## How fast is the river flowing?

Gravity can move water. Streams and rivers move because the force of gravity pulls water downhill. The flow rate of water is the time required for a volume of water to move between two points.

**Key Topic:** Surface water

**Grade Level:** 4 - 12 grade

**Duration:** 15 - 20 minutes

## Objectives:

To estimate the flow of water in a stream, creek, or river.

## Items Needed:

- Tape measure (or pace off the distance)
- Several sticks
- Stopwatch
- Calculator
- Pencil and Paper

## Activity Steps:

1. Measure a 100 foot distance along the bank of a stream. Place a group of students at the upstream end of the stream with the sticks, and the other group downstream 100 feet with the stopwatch.
2. When both groups are ready, the upstream group places a stick into the river and the downstream group times how many seconds it takes for the stick to reach them.



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3. Repeat the process several times, recording the data on a sheet of paper to compute the average. Have the students calculate how many feet per second the river is flowing (100 feet divided by time in seconds = feet per second).

## For More Fun:

Move to another part of the river and repeat. Try this activity at different rivers or several different sections of the same river. Have students compare and contrast the different rivers/ sections, noting any physical features that may affect the speed of the water. Examples include:

- curves
- straightaways
- slight downhill flows
- rocks
- islands, etc.

