

Freshwater Monitoring – Water Flow – Velocity

Aim: To measure the velocity of the water flow.

Equipment	Method	Things to discuss:
<ul style="list-style-type: none">orangetape measurenetstopwatchStream Health Monitoring Data Recording Sheet	<ol style="list-style-type: none">Choose a section of the stream that is reasonably straight, of similar width for at least 10m, and free from obstacles.Use the tape measure to measure 10m.Two people stand as marker points at each end of the 10m stretch.A third person, who will release the orange, stands in the centre of the stream, above the upstream marker point. This needs to be far enough so that the orange is floating with the water flow as it passes the starting point.A fourth person stands at the starting point, with a stopwatch, to begin timing as the orange floats past.Stop the watch at the 10m mark downstream.Catch the orange.Record the result on the recording sheet.Repeat this two more times, recording each result on the recording sheet.Find the average float time: add the three times together and divide by 3. Record the average on the data recording sheet.Water velocity is measured in metres per second. $\text{Velocity} = \frac{\text{distance (metres)}}{\text{time (seconds)}}$Record velocity on the data recording sheet.	<ol style="list-style-type: none">Ask the students to think of a way to use the equipment to find out how fast the water is flowing.The speed of something is called its velocity. This activity is to establish the velocity of the water.Watch the different flow patterns of the orange. Are there different types of flow?Where would you like to live if you were an animal in the stream?

