

Poohsticks Activity Sheet

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Play this well-loved game and see which Poohstick is the fastest!

You will need:

- Some Poohsticks (gather them from along the river bank)
- A timing device e.g. wristwatch or mobile phone stopwatch (optional)
- A tape measure or pre-measured 5 metre length of brightly coloured string (optional)
- A copy of the Poohstick Recording Chart (optional)

- 1** Find a shallow stretch of water and a suitable spot to launch your Poohsticks from.
- 2** Now find a good place to end your Poohstick race. Perhaps a big stone sticking out of the water, or a tree on the riverbank will help to mark the spot?
- 3** Stand in the river at the start point. When everyone's ready you can launch away! (Remember to place your Poohsticks in the water at the same time, and don't throw them - that's cheating!)
What happened?
 - Whose Poohstick was the fastest?
 - Whose Poohstick was the slowest?
 - Did anybody's Poohstick get stuck, or sink? Why do you think this happened?
 - Were all of your pooh sticks the same length, thickness and weight?
- 4** Have another go, this time try to use sticks of the same length, thickness and weight and see whether this changes the results.



Take it further

Why not try and work out the flow rate of the river using the following formulae:

Distance travelled in metres (D) ÷ Average speed in seconds (S) x 0.85 = flow rate (m/sec) e.g. $5 \div 17 \times 0.85 = 0.249$. The flow rate is 0.25 metres per second.

Lay your 5m tape measure or pre-measured string along the riverbank.

Drop your sticks in, one at a time, at the upstream end of the measure (i.e. at the 0m end of the tape measure) and time how long it takes to travel to the end of the tape measure.

Record your times on the **Poohstick Recording Chart**. To get an average time: add up your times, and divide by the number of sticks launched. Then, use the formula above to work out your flow rate (you'll need to use the calculator on your mobile phone for this).

Poohstick Recording Chart

Name of Poohstick Launcher		Time taken to travel 5 metres (in seconds)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
Total Time for all Poohsticks		
Divided by: Total Number of Poohsticks Launched		
Equals: Average Time Taken to Travel 5 Metres (S)		

Final Calculations: $D \div S \times 0.85 = \text{flow rate (m/sec)}$

Flow Rate: _____ m/sec

