

Experiment: Modelling blood diffusion

- 1) Place two 250ml beakers either on a light surface or white spotting tiles.
- 2) Run the tap until you feel a constant temperature. Carefully fill a measuring cylinder up to the 250ml gradient and pour the contents into one of your 250ml beakers.
- 3) Allow your teacher to carefully fill the other 250ml beaker with boiling water from the kettle. Handle this beaker with care.
- 4) Making sure your stopwatch is on zero and ready to use, pipette one drop of food colouring into each of the beakers at the same time. Start the stopwatch simultaneously.
- 5) In your table record the time it takes for the red food colouring to completely diffuse across the liquid (an evenly spread colour).
- 6) Repeat this experiment two more times to allow you to calculate an average.



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Health & Safety

- Be sure to use a small amount of food colouring to gain effective results.
- Be careful not to spill the food colouring on your clothes or on the table.
- Wear goggles throughout the experiment.
- Clear up any spills to avoid slips and trips in the laboratory
- Keep glassware on the centre of the table to reduce the chance of it breaking.

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