

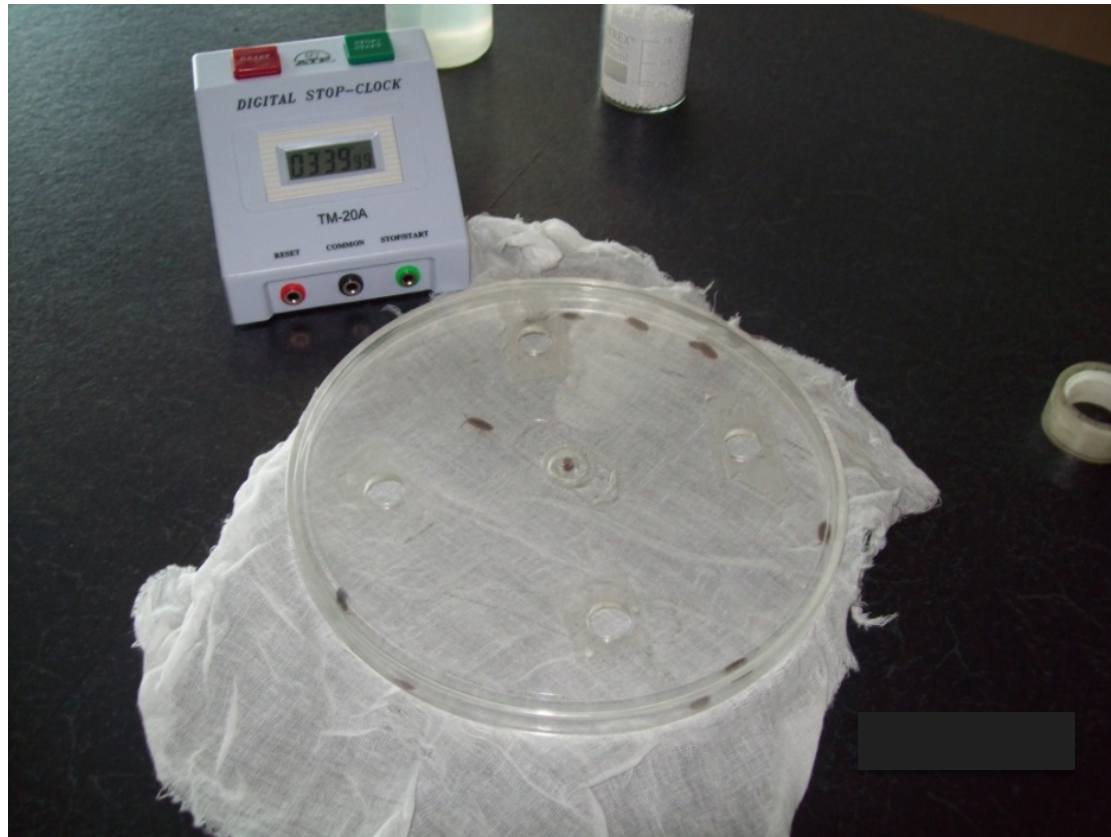
AS and A-level Biology practicals: Equipment set up

Practical 10: Investigation into the effect of an environmental variable on the movement of an animal using either a choice chamber or a maze

Equipment for woodlice in choice chambers



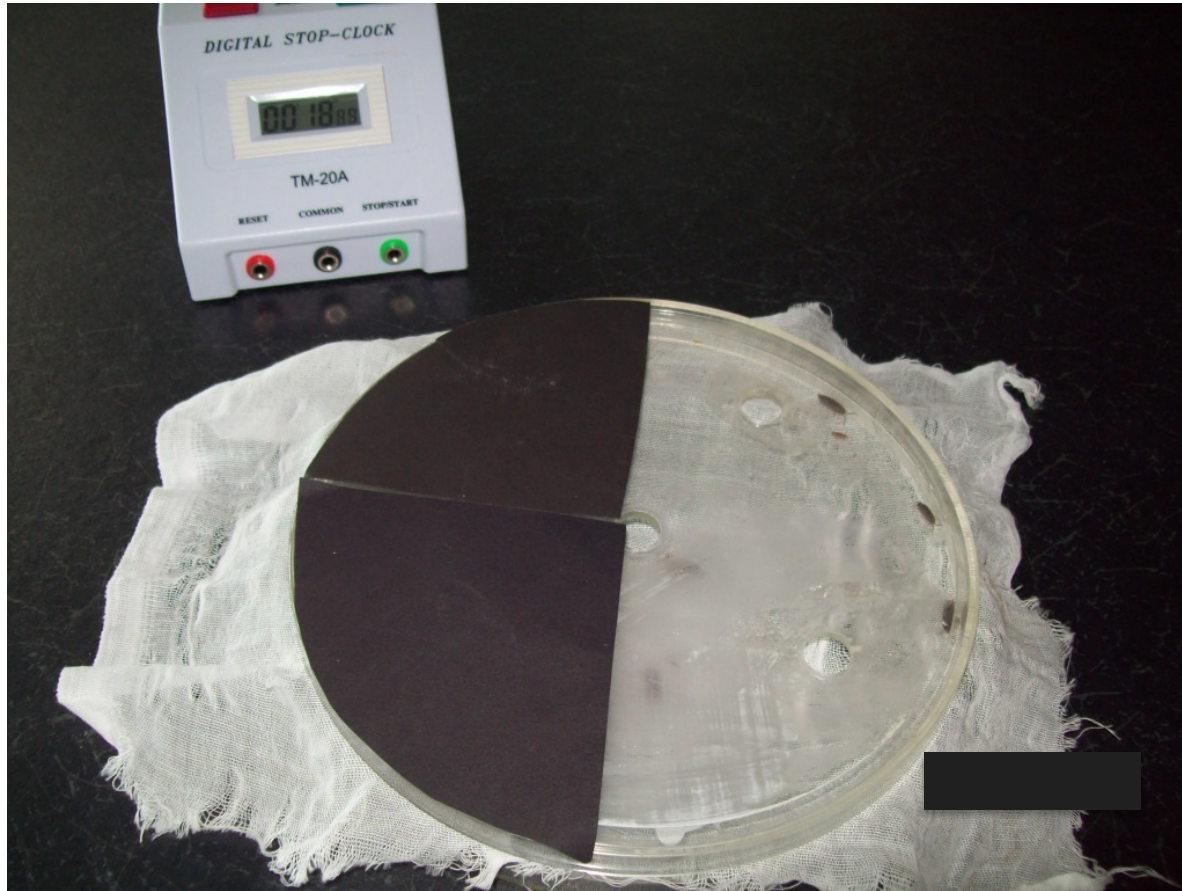
Woodlice in choice chamber



Woodlice in choice chamber

- Woodlice are introduced through the central hole in the top of the choice chamber.
- The muslin cloth is trapped between the top and the bottom of the chamber and the woodlice can walk on the cloth.
- The cloth needs to be pulled tight in the chamber.

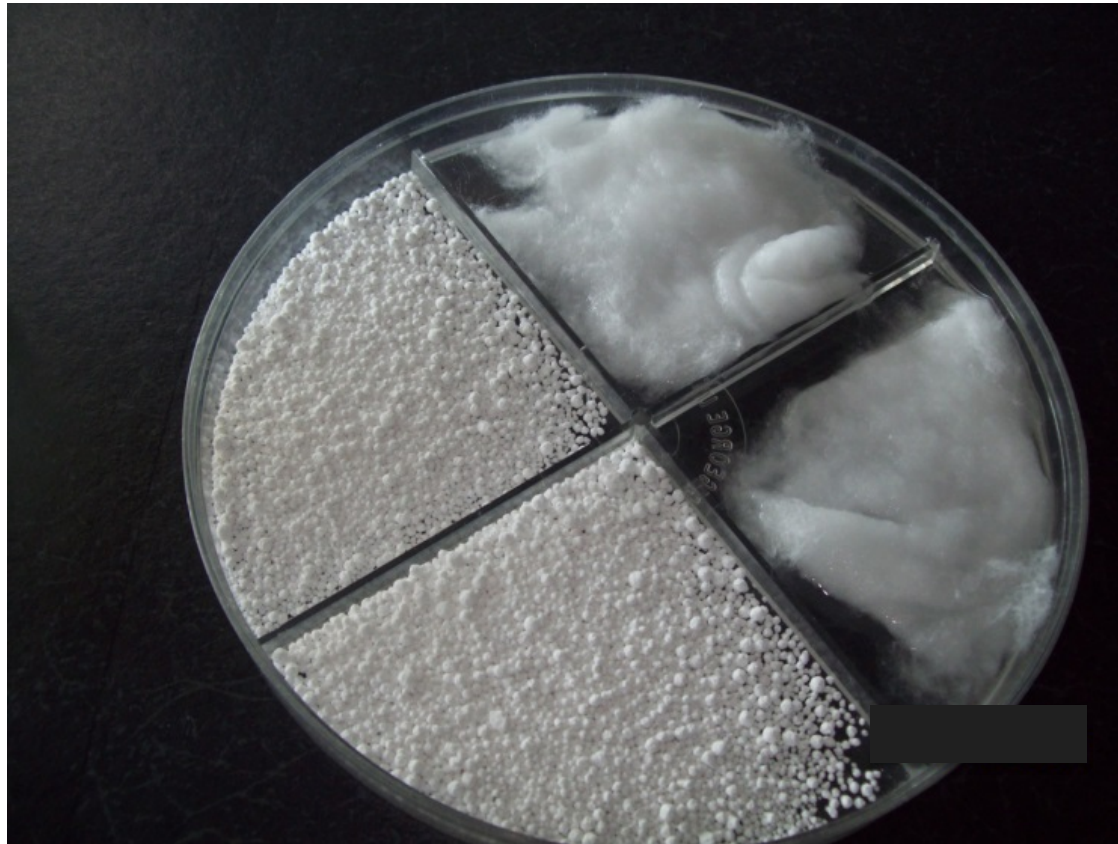
Testing light and dark environments



Testing light and dark environments

- Part of the chamber can be obscured with black paper and the other part illuminated with a desk lamp.
- The woodlice are introduced and allowed to move around the chamber for a set time.

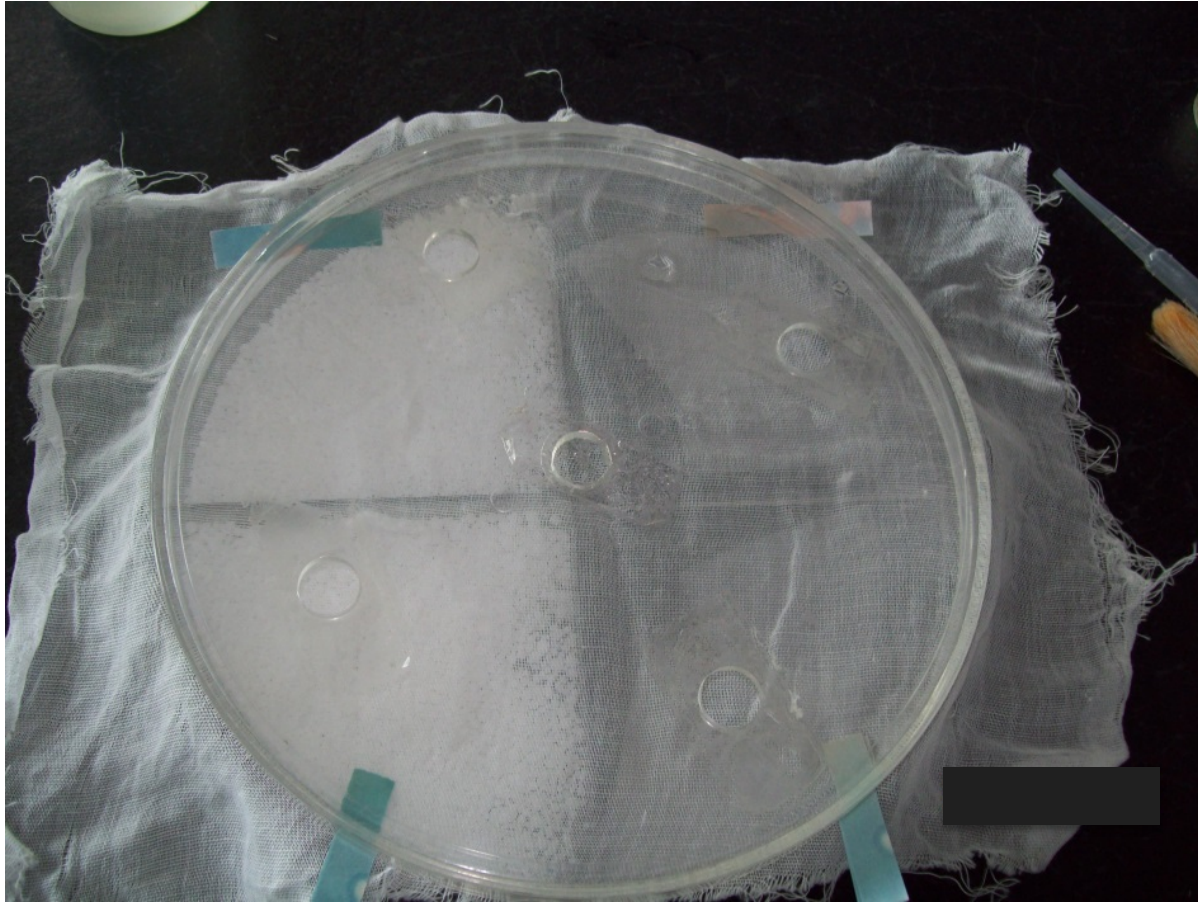
Effects of humidity



Effects of humidity

- The quarters of the chamber can be filled with silica gel or similar chemical to absorb moisture and damp cotton wool to create dry and humid environments.
- The muslin cloth should not touch the contents of the chamber and should remain dry.

Humidity testing



Humidity testing

- Dry cobalt chloride paper can be trapped under the lid of the chamber in each quadrant to check humidity.
- Handle the paper with forceps to avoid changing the colour of the paper with moisture from fingers.
- Keep the paper in a desiccator or oven until it is required.

Humidity testing

Leave the woodlice for the required time and then count how many are in each quadrant.



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