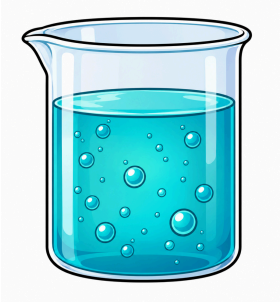
Surface Tension Investigation

Name / chosen name: _____

Work with an adult. Predict before testing; observations describe what actually happened.

Materials

Shallow water tray, large plastic-coated paperclip, small piece of tissue and one drop of dishwashing liquid.



Instructions

1. Predict whether the paperclip can rest at the water surface.
2. Lay tissue on the water and place the paperclip flat on it.
3. Wait as the tissue becomes wet and sinks. Observe the clip.
4. Add one drop of dishwashing liquid away from the clip and observe again.

1. My prediction

Observation

Safety: Adult supervision. Keep the clip and detergent away from mouths and eyes. Wash hands after the activity and wipe spills.

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Record and explain

1. What happened?

2. Was it different from my prediction?

3. What did I change or keep the same?

Scientific explanation: Water molecules attract one another, creating surface tension. A carefully placed small object can be supported at the surface. Detergent lowers surface tension; results depend on placement.

1. One further question

2. How I could test it safely with an adult

Background source: https://www.acs.org/middleschoolchemistry/lessonplans/chapter5/lesson2.html