PEPPER AND SOAP

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Aim: explain how soap changes behaviour on the liquid surface

Age: 6-10 yo
Complexity: low
Cost: <£5
Location: inside
Materials & Equipment: shallow bowl, water/milk, washing up liquid, black pepper (or glitter or food colouring)

Outline:
1 – fill the bowl with water/liquid and sprinkle pepper evenly
2 – touch with your fingers what see how it behaves
3 – add small amount of dish soap – what happens now?

Learning outcomes:

- How soap works – the hydrogel used in this experiment is a synthetic plastic
- Surface tension** – this experiments involves gels, solids and liquids
- Investigative techniques – students can be allowed to investigate various aspects of this experiment

Surface tension* - *a contractive force that allows the surface of a material to resist an external force

RISK ASSESSMENT

Adult supervision is required for any experiment!

HAZARD	Likelihood and Seriousness of Injury	Control Measures	Remaining Risk
Pepper	Can get into the eyes or nose	Be careful when putting pepper, remain at a distance, do not breath in while sprinkling. **If pepper gets into the eye wash with plenty of water**	Low
Washing up liquid	Can get into the eyes or be ingested	Be careful not to put touch yes with fingers**. If soap gets into the eye wash with plenty of water.**	Low
Food colouring	Can get into the eyes	Be careful not to put touch yes with fingers**. If soap gets into the eye wash with plenty of water.**	Low

First Aid: If pepper or soap gets into the eye wash with plenty of water

Remember - never do experiments alone!