

Surface Tension III - Paintbrush

Apparatus

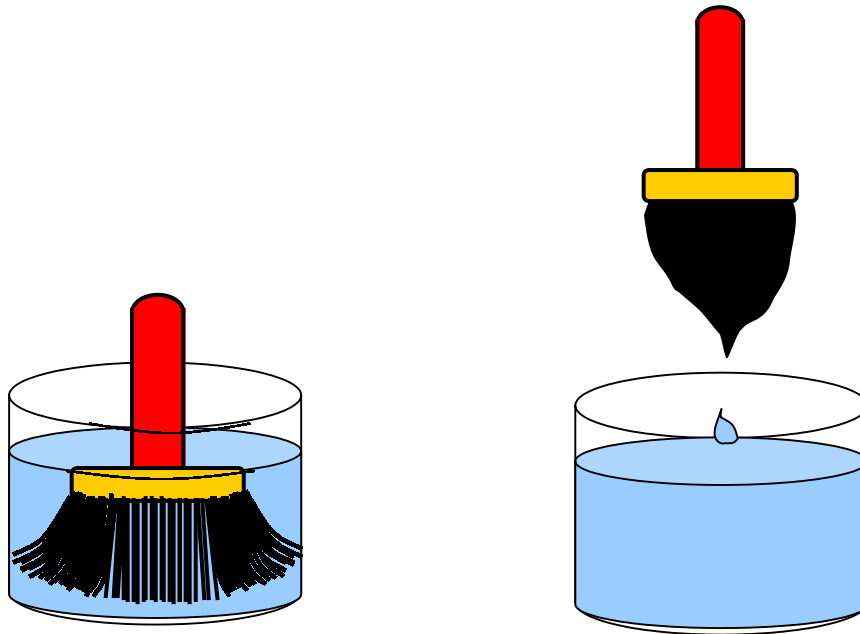
glass of water, paintbrushes with long bristles, paper towels to dry brushes

Action

The students hold the paintbrush in the water and observe the bristles. They pull it out and observe the bristles and explain the difference.

The Physics

When the paint brush is pulled out of the water the surface tension of the water on the bristles pulls them together. When it is in the water there is no inwards force pulling the bristles together, and small currents in the water fluff out the bristles.



Accompanying sheet

Surface Tension III – Paintbrush

Dip the paintbrush into the water
How do the bristles look while in the water?

Pull the paint brush out of the water.
How do the bristles look now?

Explain your observations.