Science Investigation: 4/5/20
(Summer Term Week 3)

Let's see if you can use your scientific skills to **perform a simple test**, **observe closely** and **suggest answers to questions**.

Follow the instructions to perform the test.

Observe (watch and think about) what you see happening.

Why do you think it is happening?

Draw and write about what you saw in your workbook.

FLOATING PAPER CLIP

SCIENCE CHALLENGE 15

Designed by Nor,
Test engineer at Dyson

The brief

Make a paper clip float on water.

The method

1. Fill the bowl with water.
2. Tear off some tissue paper (around 10cm x 5cm).
3. Gently place the tissue paper onto the surface of the water so that it floats.
4. Place the dry paper clip on top of the tissue.
5. Use the rubber end of the pencil to carefully poke until the tissue sinks and the paperclip is left floating.

Materials

- Water
- A bowl
- Tissue paper
- A paper clip
- A pencil with a rubber on the end

How does it work?

The paper clip is held afloat by the surface tension of the water. Water molecules are polar, so the molecules pull on each other. This creates a tension – like a thin, flexible membrane on the surface – which helps hold the needle afloat. The tissue paper allows you to lower the paperclip onto the water gently, without breaking the surface tension.

Did you know?

Insects such as pond skaters use water tension to appear to walk on water.