

Hydrophobia

What happens if you place plastics in water?

Resources needed:

3 plastics (e.g. plastic bag, milk bottle top, packing peanuts)

Water

Scrap paper

2 other materials, e.g. a few teaspoonfuls of salt/sand/oil

Crayon or crayons

Watercolour paints and paintbrush

Instructions:

- One by one, place each of the materials in water
- Discuss your observations.

Plastic and oils are hydrophobic - this means they repel water.
Why do plastics take a long time to break down in the environment?

Early years,
Key stages 1/2

Resources needed

20 mins

Make your own paper

Instructions:

- Take your water-soaked scrap paper, and mush it up with your fingers.
- Press it together on a surface and flatten it. You may wish to place a weight on top.
- Wait for it to dry.

Plastic art

Instructions:

- Use a crayon (paraffin wax) to draw on a sheet of paper
- Paint over the paper using watercolour paints
- Discuss your observations.

Is it easier to recycle paper or plastic?

Early years,
Key stages 1/2

Resources needed

20 mins

More reading for interested grown-ups:
<https://www.envchemgroup.com/norman-billingham.html>