Ardrossan Academy - Science Faculty

Hi to all new pupils,

Welcome to the Science faculty at Ardrossan Academy, we hope you will enjoy your time here with us. There are eight science teachers and one technician here to help you learn. In the first few years here you will participate in many exciting experiments to help you to become scientists yourselves. You will learn about life, the human body, the earth, space, electricity, chemicals and many more.

To get you started there are a few experiments here you can try at home, send in photos of your results the school twitter account #ArdAcademy

You can also follow the science accounts #ArdAcadPhysics #ArdAcadChem or #ArdAcadBio

We look forward to seeing you all in S1.

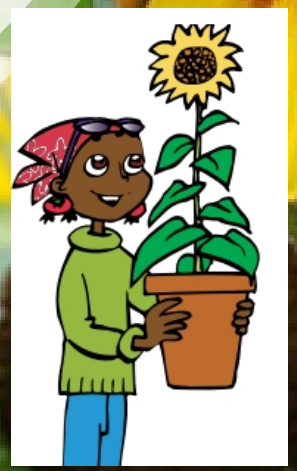
Team Science

Safety

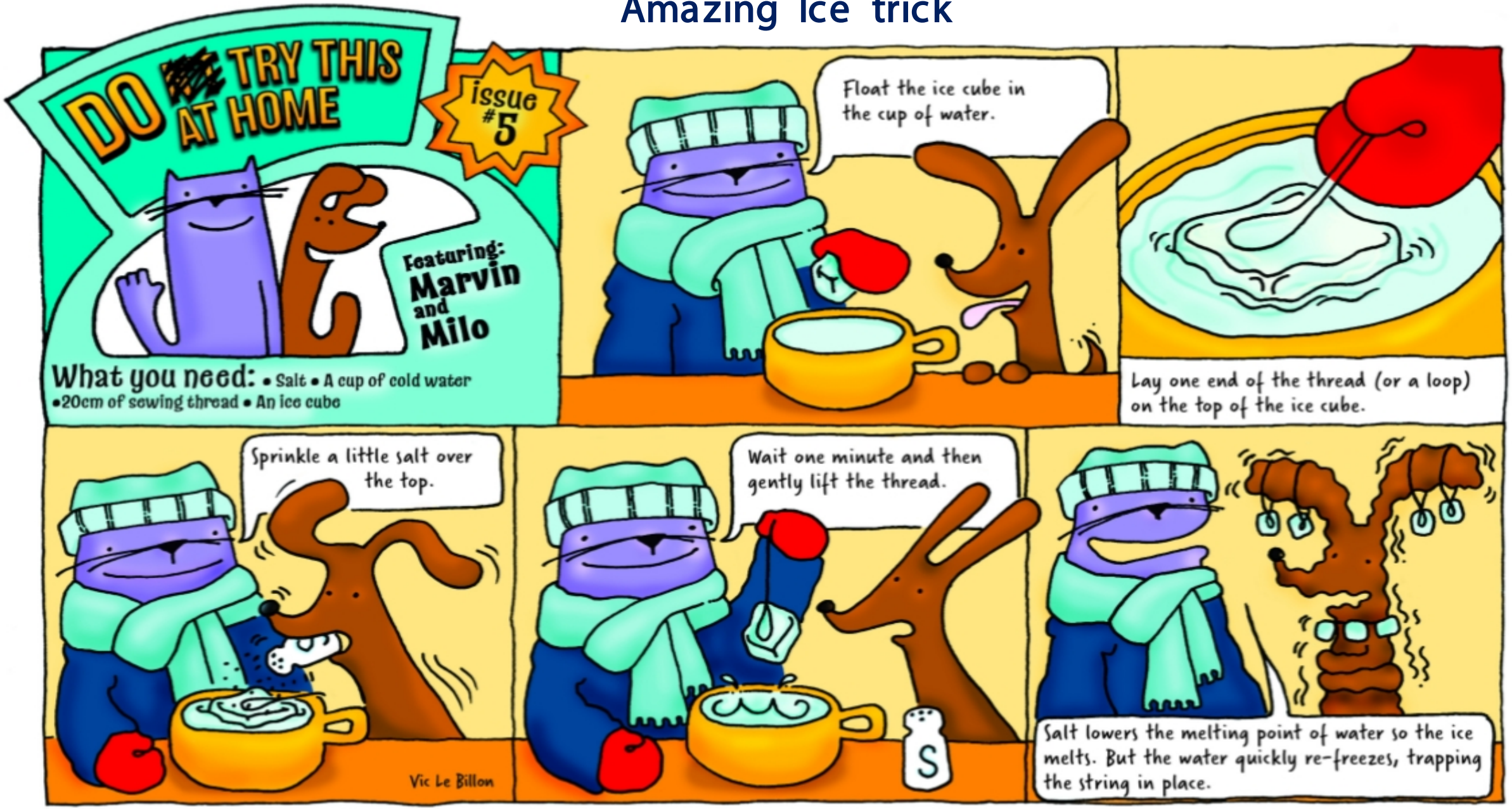
- Please make sure you seek permission from a parent or guardian before you start any experiment at home.
- Please note one of the experiments uses peanuts but raisins can be used as an alternative if allergic to peanut.
- Tidy up afterwards.
- Make sure you stay safe, don’t do anything that may harm yourself or others.
- Wash your hands.

Grow a Sunflower

- **You will need sunlower seeds**
- Sunflowers can be sown straight in to the ground where they are going to flower, make sure the space you are going to sow is weed free.
- Rake the soil and make some holes 1cm deep.
- Place the seeds in carefully and cover them up with soil. Don't forget to water the seeds gently and wash your hands afterwards.
- Be careful, as slugs and snails like to eat the new shoots. You may like to protect the seedlings by cutting the top off a plastic bottle and placing it over your seedlings.
- As your sunflower begins to grow taller than you, you will need to help support the stem, by placing a cane near the stem and loosely tying the cane to the plant with string.
- Watch your sunflower grow and grow and grow.



Amazing Ice trick



Download more Marvin and Milo activities at iop.org/marvinandmilo

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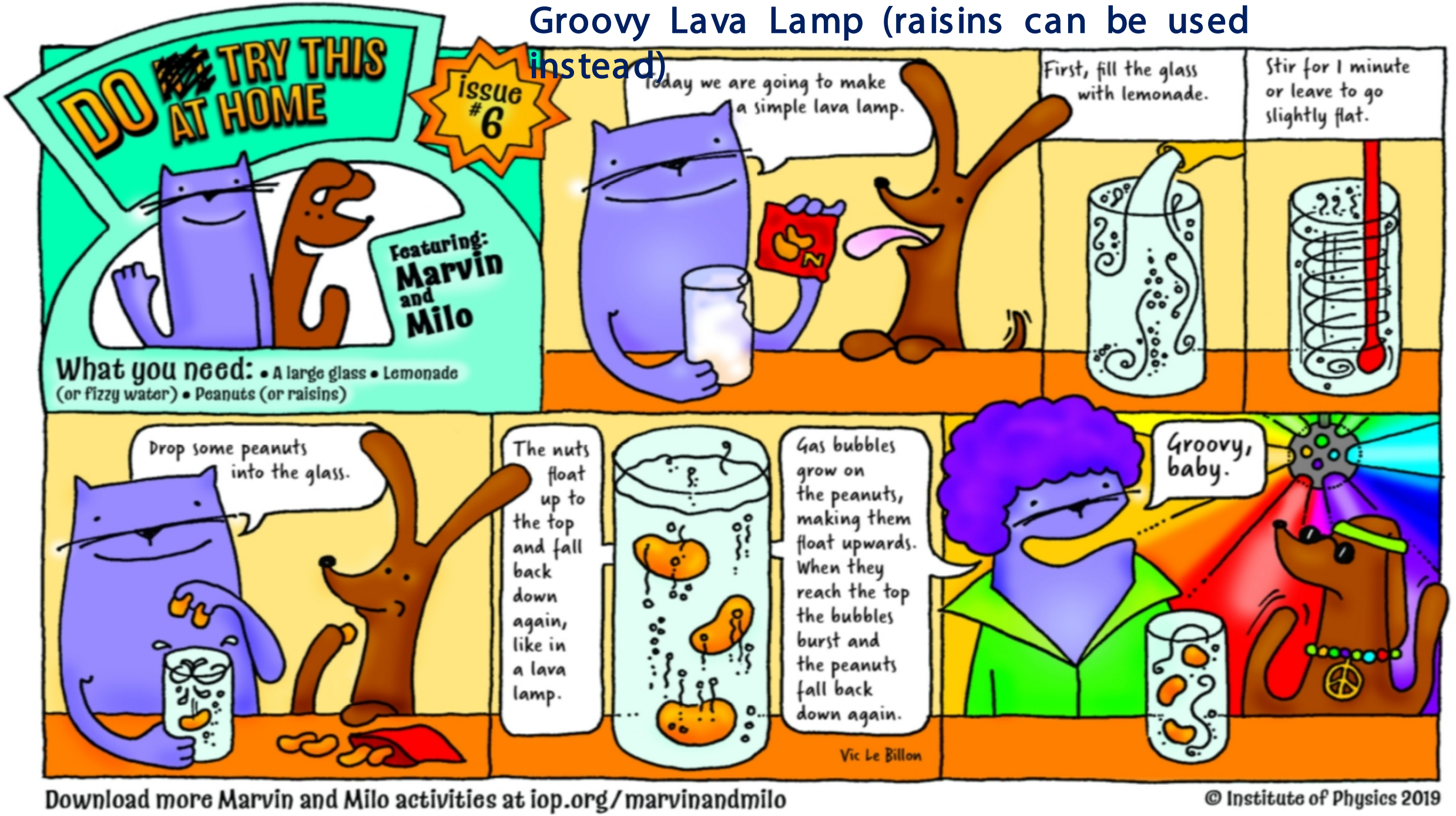
Groovy Lava Lamp (raisins can be used instead)



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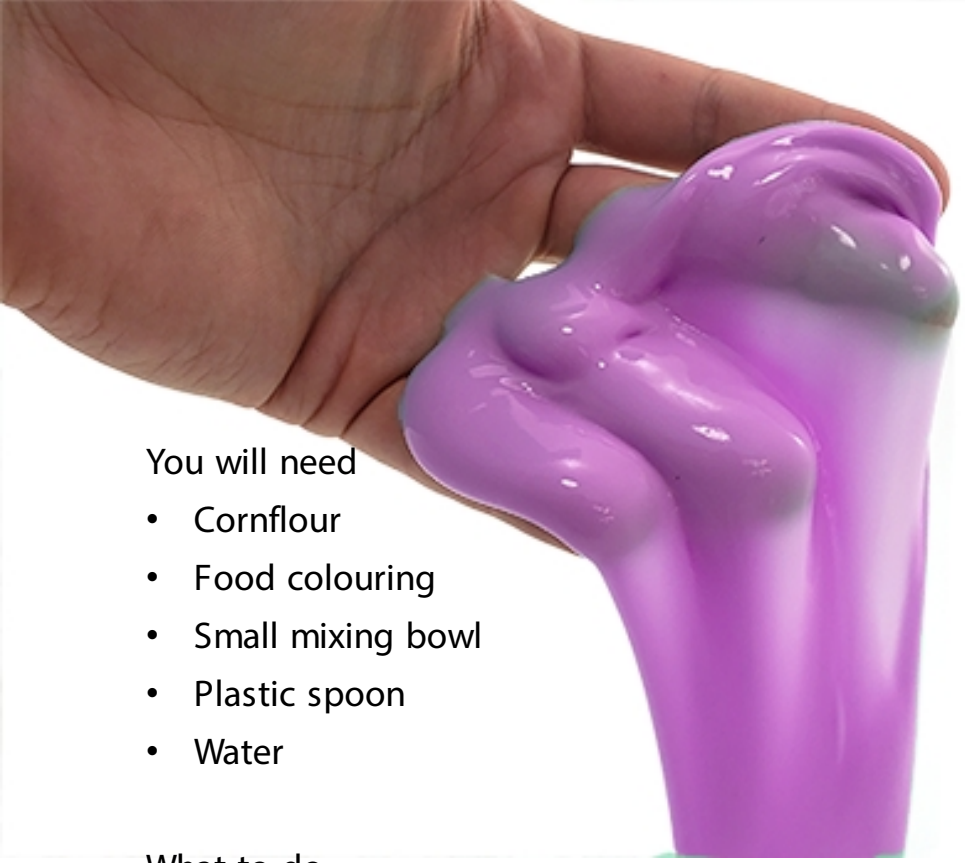

Slime

You will need

- Cornflour
- Food colouring
- Small mixing bowl
- Plastic spoon
- Water

What to do

- Pour some cornflour into a mixing bowl.
- Stir in small amounts of water until the cornflour has become a very thick paste.
- To make the slime the colour of your choice, thoroughly stir about five drops of food colouring into the mixture.
- Stir your slime REALLY slowly. This shouldn't be hard to do.
- Stir your slime REALLY fast. This should be almost impossible.
- Now punch your slime REALLY hard and fast. It should feel like you're punching a solid.
- You can keep your cornflour and water mixture covered in a fridge for several days. If the cornflour settles, you need to stir it to make it work well again.

Grow Salt Crystals

- It takes a few days, but by growing the crystals, you'll see how solutions are made and how the crystalline shapes of salt is formed.
- **Take Care!** Do not handle the jars until the water has cooled to room temperature.

What You'll Need

- Salt
- Water
- A clean, clear glass container – a jam jar is perfect
- String
- A spoon for stirring.

What To Do

- Carefully pour the solution into your jar. Putting a spoon into the jar before adding the water should prevent the jar breaking.
- Stir salt into hot water until no more salt will dissolve (crystals start to appear at the bottom of the container).
- Suspend string into the jar from the spoon laid across the top of the jar.
- Leave your jar somewhere it will not be disturbed and wait for your crystal to grow!