

Dancing Raisins

Materials



Raisins



Still water



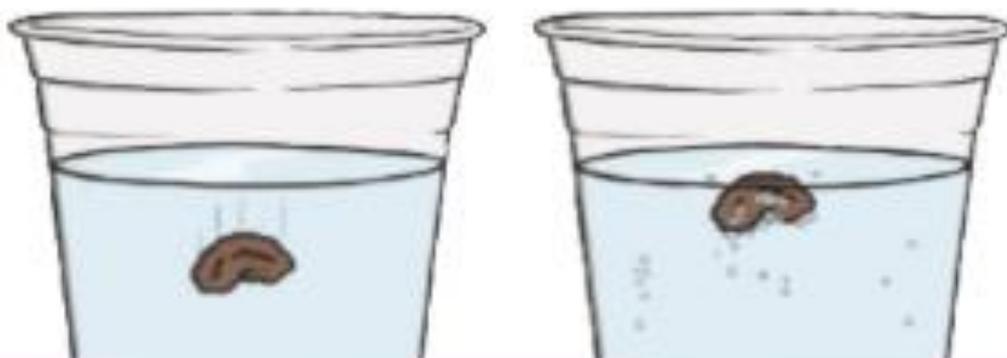
Fizzy Water



Two clear,
plastic cups

Instructions

- 1 First, carefully pour some still water into a clear, plastic cup.
- 2 Gently, drop a raisin into the water. Did it float or sink?
- 3 Next, pour some fizzy water into a different clear, plastic cup.
- 4 Gently, drop a raisin into the water. Did it float or sink?
- 5 What was the difference between the two reactions. Why do you think this was?



The Science Bit

In the still water cup, the raisin sinks because the raisin is denser than the water.

In the fizzy water cup, the raisin is again denser than the water. However, the bubbles get trapped in the grooves of the raisin, helping it to float back to the surface. When the bubbles pop, the raisin sinks back down.

How to Grow a Rainbow

Science Experiment

Did you know that you can grow your own rainbow?

You will need a scientific process called the **capillary action**. This action happens when a liquid moves up through a hollow tube or into a spongy, solid material. It happens when three forces work together: **cohesion**, **adhesion** and **surface tension**.

Water molecules like to stick to each other - this is called **cohesion**. They also like to stick to solids in a process called **adhesion**.

In this experiment, you are going to use kitchen roll. The fibres in kitchen roll have lots of little holes. Water is **absorbed** through the kitchen roll because when the first water molecule **adheres** to it and begins to move upward, it pulls the next water molecule up with it, like a chain.



Words To Learn:

- capillary action
- adhesion
- cohesion
- absorbed

You will need:

- Kitchen roll/paper towel
- Felt-tip pens
- Two small bowls of water
- Paperclip
- Thread

Rain Cloud in a Jar

You will need:



Shaving
cream



A clear
large jar



Water



Blue food
colouring



Pipettes or
eyedropper



Small
bowl

Method:

1. Fill the large jar with water, leaving 2 inches at the top.
2. Add the shaving cream to the top of the water until it reaches the top of the jar.
3. Next, add 1 cup of water to the small bowl and 3 drops of blue food colouring.
4. Mix the water and food colouring together.
5. Use the pipette to add drops of the water mixture to the top of the shaving cream cloud.
6. Continue adding the water mixture until you begin to notice the raindrops begin to break through the bottom of the cloud.



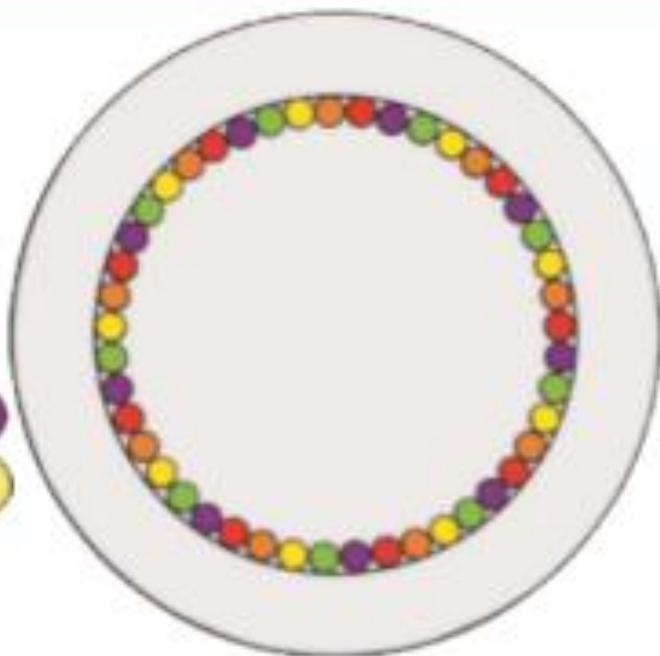
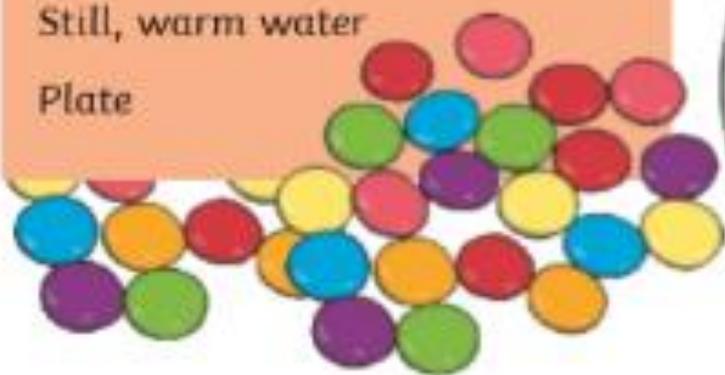
Fruity Sweets Colour Mixing

You will need:

Fruity, rainbow-coloured sweets

Still, warm water

Plate

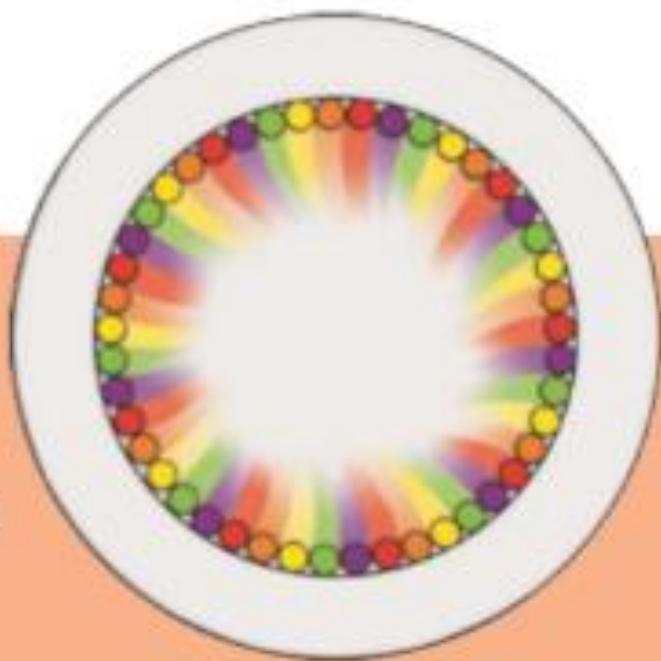


Instructions

1. First, place the coloured sweets around the edge of the plate in a circle shape.
2. Then, get some warm, still water in a jug. Ask an adult for help.
3. Next, pour the warm water into the middle of the circle until it reaches the sweets.
4. Watch what happens.
5. Why do you think this happens?

The Science Bit

The shells of coloured sweets are made from sugar. When sugar is put in warm water, it dissolves. As the colours meet, they mix, creating different colours.



Awe and Wonder

Soap Bubbles Prints

You will need:



Ready mix paint

Shallow tray



Water



Brushes



Washing-up liquid



Straws



White paper



Paint pots

Method:

1. Mix together, $\frac{1}{3}$ ready mix paint, $\frac{1}{3}$ water and $\frac{1}{3}$ washing up liquid in a paint pot.
2. Pour into a shallow tray.
3. Take a straw, place into the liquid and begin to blow, make sure not to suck otherwise you'll end up with a mouth full of paint!
4. Move the straw around creating bubbles.
5. Once the tray is full of bubbles take a sheet of paper and lay it carefully on top of the tray pressing down gently.
6. Lift it off and see the print you have created of the bubbles.



The Science Bit

Because washing up liquid can hold air inside its bubbles when you blow air in to the mixture it stays there creating lots of coloured bubbles. Because there is water in the mixture when you put paper on top of it the water is sucked into the paper, leaving a print.