



# Make a Rainbow!

## Predict:

Have you ever noticed how colourful Skittles are? What if we told you that you could turn them into a rainbow with just a bit of water?

But first, let's make some predictions!

1. What do you think will happen when you pour water over the Skittles?
2. Will the colours mix together or stay separate?
3. Do you think warm water will make the colours spread faster than cold water?

## What you will need:

- A white plate or shallow dish
- A handful of Skittles in multiple colours.
- Warm water
- Cold water (optional for comparison)

## Instructions:

1. Place the Skittles in a circle around the edge of the plate. Try to alternate the colours for a rainbow effect.
2. Carefully pour warm water into the centre of the plate until it just covers the Skittles.
3. Watch closely as the colours begin to spread from the Skittles into the water.
4. Try the same experiment using cold water. What differences do you notice?

## Extra for Experts!

- Try arranging the Skittles in different shapes or patterns and see how the colours move.

## Reflect:

- Did the colours spread like you thought they would?
- Which water temperature worked faster, warm or cold?
- Did the colours mix together or stay in separate lines?
- What do you think would happen if you used a fizzy drink or vinegar instead of water?

## How does it work?

Skittles are coated in sugar and food colouring. When you add water, the sugar and colour dissolve into the liquid. **This process is called dissolving.**

Once dissolved, the colour and sugar begin to diffuse, which means they spread out through the water. Because the Skittles are placed evenly around the plate, the colours move toward the centre in beautiful patterns.

**Warm water speeds up the dissolving** process because heat gives the molecules more energy to move. That's why the colours spread faster in warm water than in cold.

And here's a fun fact: the colours often don't mix right away because of something called density and molecular structure—each colour spreads at its own pace!