

# SKITTLES SCIENCE

How can we separate the colours of skittles into a pattern?

### HOW TODOIT

- 1) Position your skittles in any pattern around the outside of your bowl. Make sure you have a mix of colours.
- 2) Carefully pour warm water onto the plate until the skittles are half submerged.
- 3) Observe what happens to the colours!

## YOU WILL NEED

- · Skittles
- Shallow bowl (either white or clear with white paper underneath)
- · Warm water
- · Cup



## INVESTIGATE



Arrange the skittles in different colour combinations.



Time how quickly it takes for the colours to dissolve.

# WHAT IS HAPPENING?

The coating on a skittle is made up mostly of sugar and food colouring.

The warm water causes the colouring and sugar to <u>dissolve</u> and <u>diffuse</u> through the water.

The reason the colours do not initially mix is due to water stratification.

Each colour creates a water solution with slightly different properties (e.g. density). This creates a barrier that prevents the colours from mixing.

