

Diffusion of dye investigation



View the [video](#) that shows how dye particles from the arrangement of skittles, shown above, diffuse away from the source and into the plate filled with water.

A magician wishes to perform a party trick that involves each skittle growing a coloured tail that curls into the centre of the plate. It is crucial that the trick take approximately 20 seconds to complete, otherwise the young observers may get distracted or bored.

Temperature of the water is crucial but an investigation needs to be conducted.



- i. Formulate a [hypothesis](#).
- ii. Present your results in the form of an [investigation report](#).
- iii. Use your data to predict the temperature of the water that will allow for the tail of each skittle to curl into the middle of the plate in exactly 20 seconds.