

## Changing States of Matter Experiment

I want you to conduct your own experiment with freezing different liquids to find out if they all freeze in the same way or are differences observed.

### **You will need:**

Plastic cups/beakers for freezing - same size

Water

Boiled water

Lemonade

Food colouring

Salt

### **You will need to make different solutions**

Cup 1 - tap water

Cup 2 -boiled water

Cup 3 - water mixed with 5 teaspoons of salt

Cup 4 - water mixed with 3 teaspoons of food colouring

Cup 5 - lemonade

- You must allow all the different liquids to freeze, this may take a few hours.
- I want you to predict what will happen to each solution. For example: Will clear ice form? Will it be smooth ice? Will all water freeze the same way?
- After your liquid is frozen you will need to collect your results and put them into a table. Heading might include texture, transparent, opaque, colour. Also record any unexpected results.
- When you have collected your results, you must hypothesise why you think you think certain things happened in some solutions.