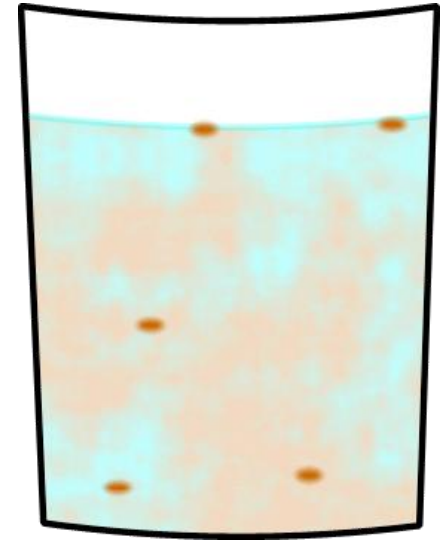


## Unit 6C: More about dissolving



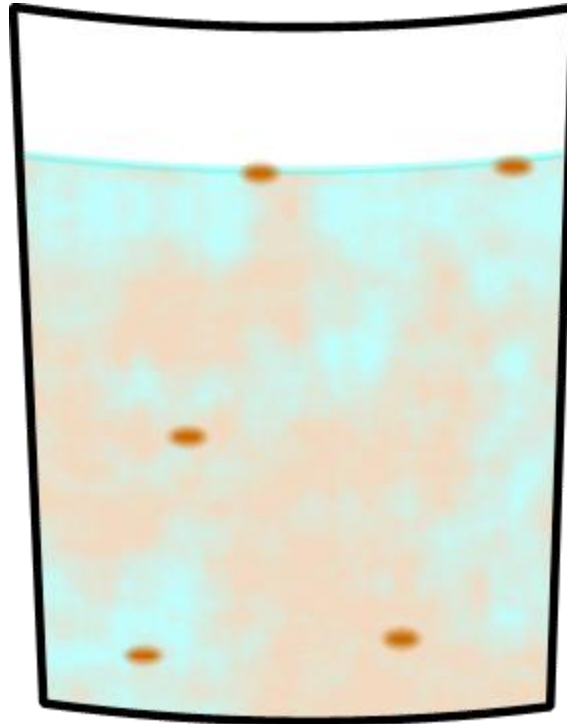
# Learnanywhere

# More about dissolving



<b>Dissolved</b>	When a substance 'disappears' in liquid
<b>Undissolved</b>	When a substance will not 'disappear'
<b>Solution</b>	The product when a substance is dissolved
<b>Mixture</b>	When 2 or more substances are mixed together
<b>Evaporate</b>	When a liquid changes to a gas
<b>Condense</b>	When a gas changes to a liquid
<b>Pure</b>	A pure substance has no other substances in it
<b>Filtering</b>	A method of separating undissolved solids from a liquid

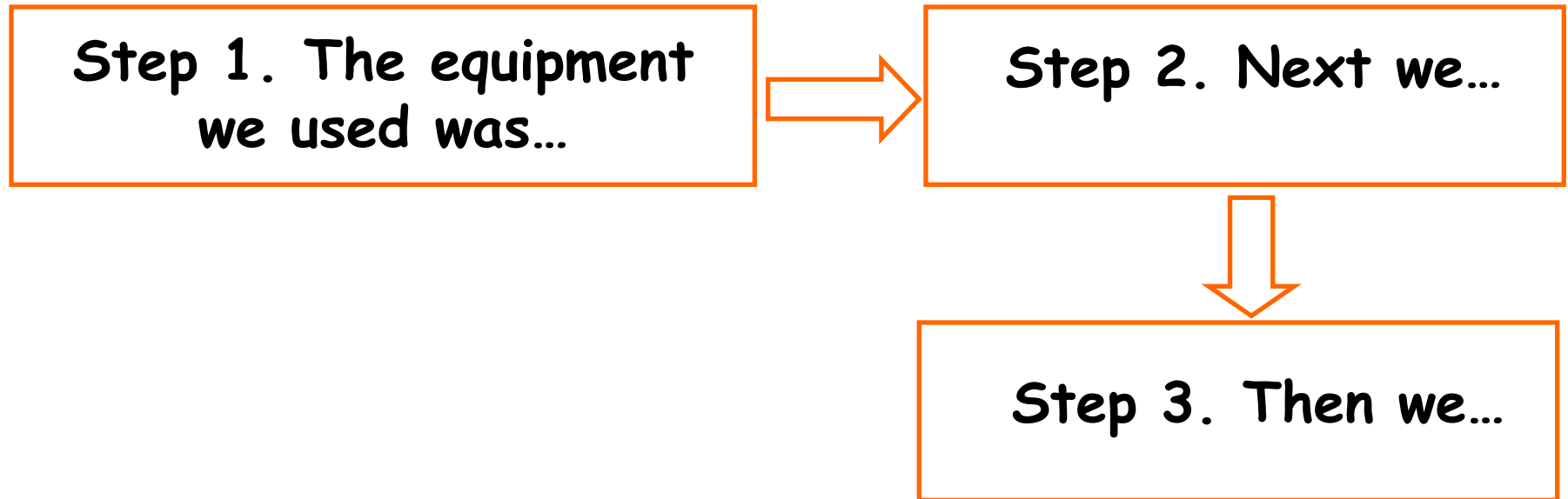
Your challenge is to take the beaker of dirty, puddle water and make it clean. Make a note of everything that you did to clean it"

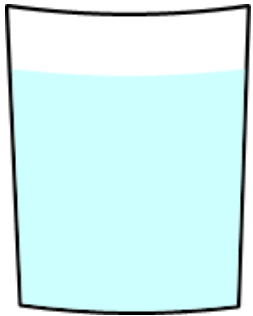


Produce a flow chart to show how you cleaned the water

Is the water safe to drink? Explain your answer.

## How to begin your flow chart





Tap water



Sea water



Distilled water



Cleaned puddle  
water

Which of these beakers will have dissolved materials in them? You must give a reason for your prediction and then you need to explain how you can test your prediction

In your explanation you may find some of the following words useful:

Dissolved

Evaporate

Filter

Solid

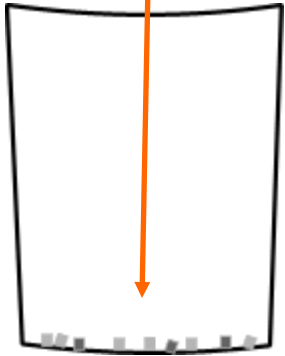
Beaker

Solution

Heat

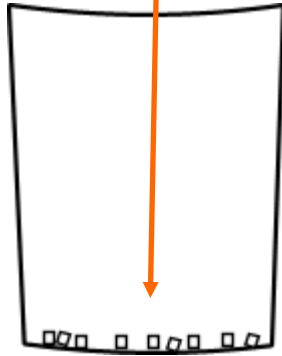
What was left when the water had evaporated?

Some small bits



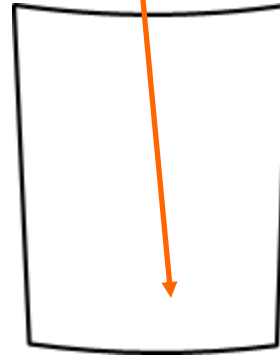
Tap water

Salt



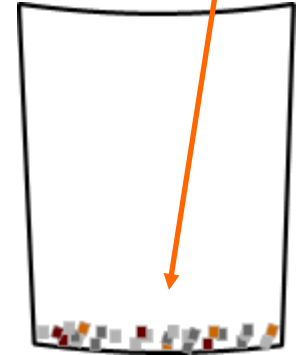
Sea water

Nothing

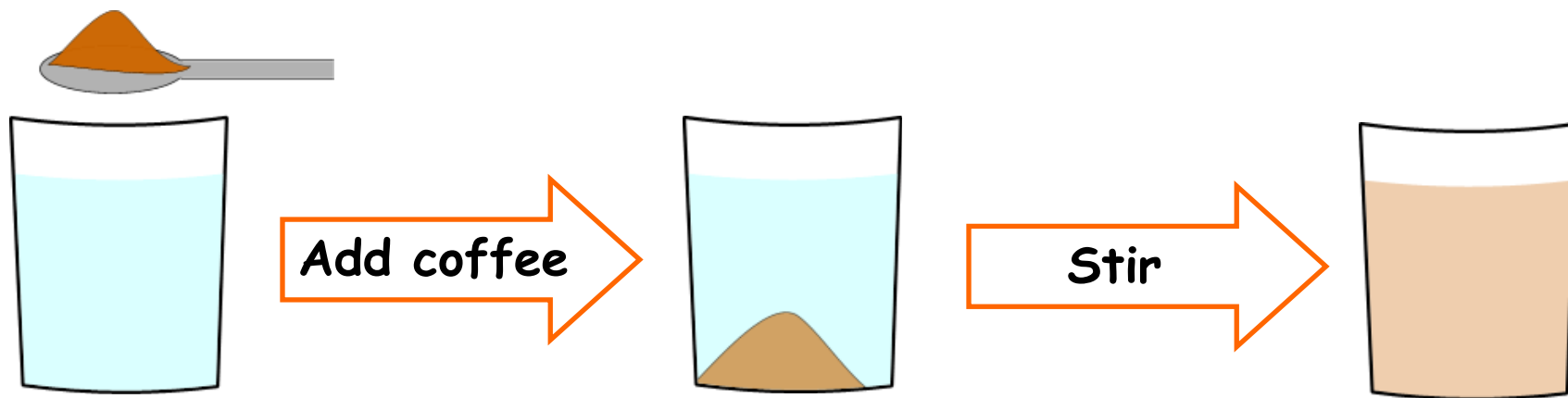
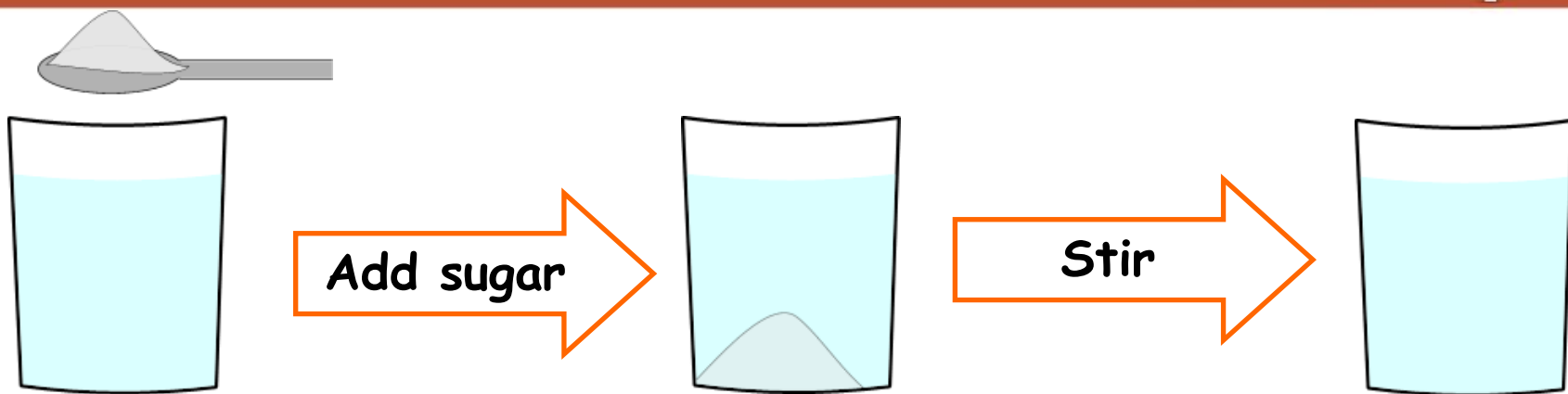


Distilled water

Lots of different coloured bits

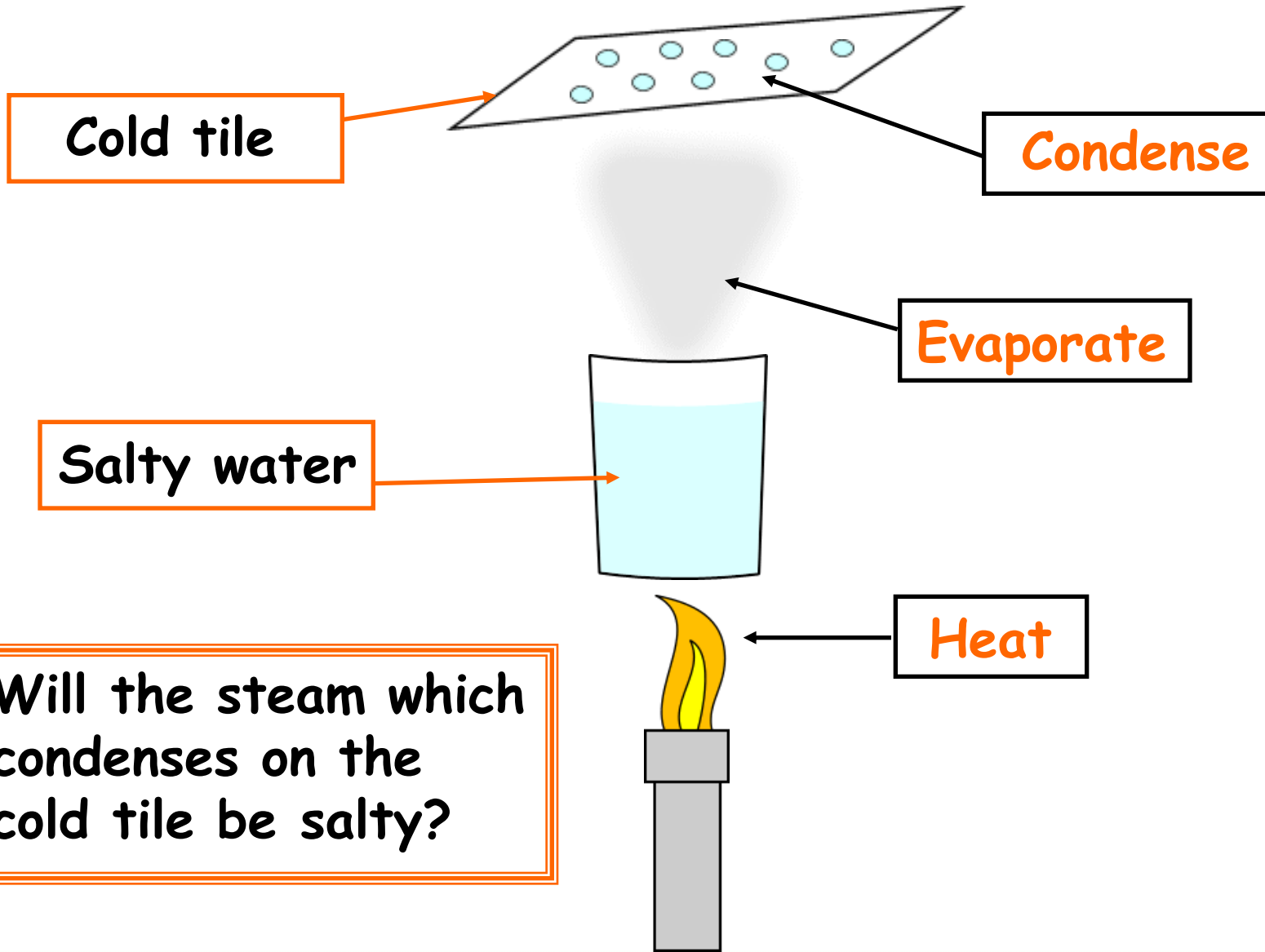


Cleaned puddle water

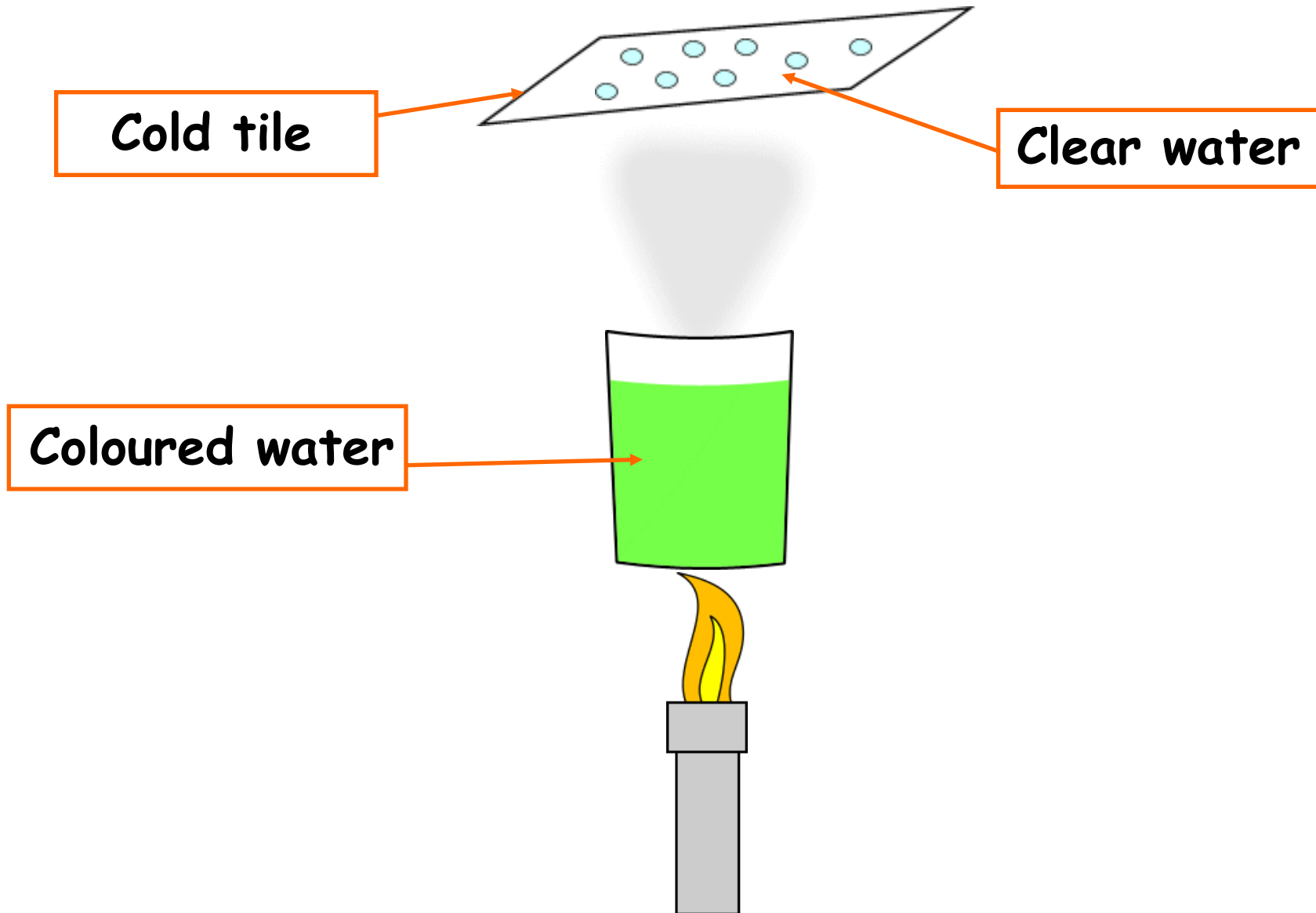


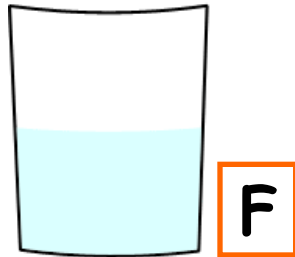
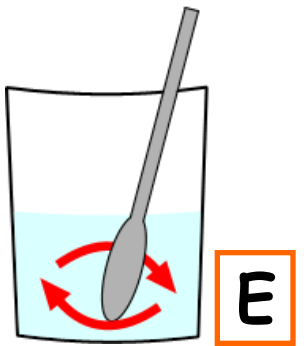
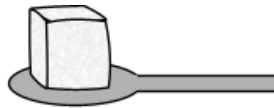
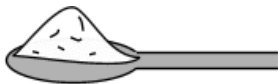
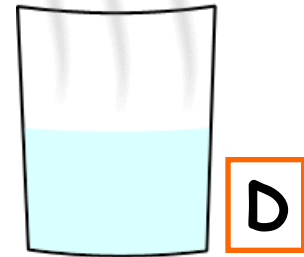
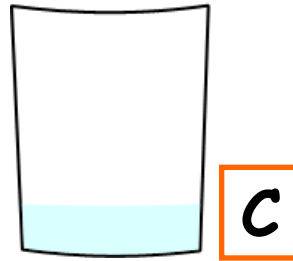
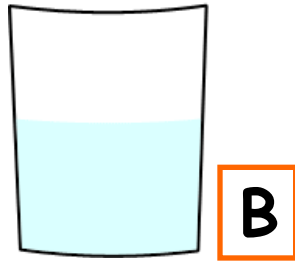
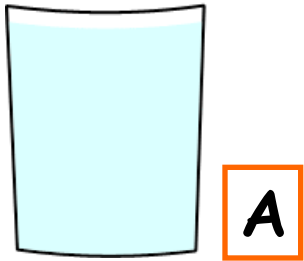
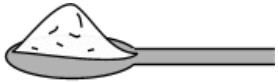
Which of the substances has dissolved?





Will the steam which condenses on the cold tile be salty?





Which beaker do you think the sugar would dissolve in most quickly?

Try to explain your answer

What factors do you think affect how quickly the sugar dissolves?

Size of particles

Volume of water

Stirring

Temperature of water

Choose one factor to investigate.

Which factor have you chosen?

What do you think you will find? Try to explain your answer, being as scientific as possible.

Plan your investigation. You will need to make a list of apparatus and fully describe how you will carry out the experiment including how you will ensure it is a fair test

You need to present your results using a line graph



What do your results show?

What conclusions can you draw?

The manufacturer of an artificial sweetener needs to know how long they take to dissolve in chilled water.

A class of schoolchildren have obtained the following results:

Temp. of water	Time 1	Time 2	Time 3	Average time
Chilled water 5°C	8.1	8.4	9.0	8.5
Tap water 12°C	6.3	5.8	6.2	6.1
Room temp. 20°C	4.15	4.1	3.9	4.05
Heated water 30°C	1.4	1.7	1.4	1.5

