Melting

What's the best way to melt
your ice blocks? This could be a
fun competition – who can free
their toy from the ice block first?
What happens if we pour salt onto the
ice? How about we drop the ice in our
warm bath (especially if the water is
coloured). How about filling a water
pistol with warm water and aiming
for your block? With supervision
we could even try heating
the ice in a pan.



Fizzy Potions

Experimenting

Ice Creations

Making ice can be lots of fun!

You can use an ice cube tray or make much bigger blocks by filling small plastic bags with water or even rubber gloves to make frozen hands! What happens if we add food colouring to our water before freezing?

Can we hide little objects in the blocks?

What about some leaves or petals?

Are there other ways we can

make our blocks look/smell/taste



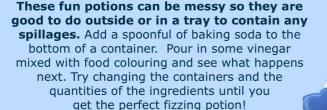
Ink Separation

Use a felt tip pen to draw a line onto a strip of kitchen paper 1cm from the bottom.

Tape the strip to a pencil so that you can dangle it into a glass of water, with the bottom just touching the water. As the water is absorbed watch how the ink climbs and separates. Try with different colours or ink types – which gives the most impressive results?

Rainbow Water

The more sugar that you add to a liquid, the denser it becomes. If you add different quantities of sugar to four glasses of differently coloured warm water you can then try layering them in another glass to create magical rainbow water. Try showing off your trick to an adult who hasn't seen you add the sugar, and they will be amazed at your magic powers!









#ReclaimPlayfulness

Get Ready

Doing experiments at home can feel a bit 'messy'. Think in advance about ways you can make this more manageable:

- If possible, use an outdoor space, especially when playing with water.
- If you must be inside is there a place where it would be sensible to keep things contained? Do you have a bath or shower area that might be suitable?
- You can use resources like baking trays to keep mess to a minimum.
 You might want to consider using aprons, or a plastic sheet which is wipeable and protects tabletops.



Why Experiment?

Experimenting helps our children's curiosity to develop. This could be the start of a lifelong love of science – and we know how crucial our scientists have been over the last year.

Experimenting and playing can help children to understand scientific concepts and broaden their scientific vocabulary.

When a child experiments, they also learn in other areas, such as making predictions, persevering, analysing and problem solving.

Different ways to experiment

Container play can be a great way to learn about capacity and is also perfect for making predictions:

- Which container might hold the most/least
- Can you find three containers that allow you to fill all the others without any overflow?

Experimenting doesn't always have to involve substances like water – how about being playful with shadows?

- We could make our own sundials.
- We could draw round different shadows.
- We can make funny shapes and characters using shadows from our hand shapes.

Adaptations

You can adapt an activity to suit your child's stage of development and learning needs. You know your child. Do they need to see you have a go first? How long will they stay focussed? Do they need a challenge? Are they ready to show YOU something new?

Here are some ways you can adapt an experimenting activity.

At earlier stages of development and for children with learning differences:

- Focus on exploring the resources rather than aiming for a definite outcome - think about key words that are suitable for your child, e.g., cold/hot.
- Show your child what they can do by getting involved and playing with the substances too – model what you are expecting from them.

Ideas for challenges:

- Before you start experimenting, encourage your child to predict what might happen, and why do they think this?
- Can your child think of changes to the experiments that might lead to a different outcome?
- Could we film the results of our experiments and write down what happened? Can we come to a conclusion as to why?