

Below are 5 different water experiments to do at home with your kids. All of them only require a few items and are quick and easy to try out.

These experiments are a perfect way for your child to practise predicting outcomes.

Building a hypothesis is an important part of any experiment and teaches your child about cause and effect. Before conducting each experiment, discuss with your child what they think about the outcome and why. Encourage their imagination and remind them it's okay to get things wrong- that's why we experiment! Once each experiment is complete, chat about the result- did they guess correctly? Why/why not?

Apologies in advance if the water makes a bit of a mess!

EXPERIMENT 1

Sink or float

Gather various (waterproof!) items from around the house and test whether they will sink or float.

What you will need:

- Various waterproof items
- Sink or wash tub

STEP 1 Fill your sink or a wash tub with water

STEP 2

Select items to test (cans, plates, forms, wooden spoons, water bottles, fruit and veg, tin foil, paper clips and anything else close by)

STEP 3

Predict what each item will do in the water



STEP 5

Test further, if a can floats initially, what can you do to make it sink? (If a whole orange sinks, why do the pieces float when we cut it up?)

STEP 6

See if the floating items and sinking items have anything in common- can we find a reason for the outcome?







EXPERIMENT 2

Skittle Patterns

Use Skittles to test what happens with the colour in the water. The sugar and colouring dissolve in water, observe if and how the colours mix together.

What you will need:

- Skittles
- Different sized containers

STEP 1

Open a packet of skittles and separate the skittles into colour groupings.

STEP 2

Pick a container with a flat bottom that can hold a few centimetres of water.

STEP 3

Place the skittles on the bottom of the container in a fun pattern.

STEP 4

Predict what will happen when the water is poured in.

STEP 5

Gentle pour in enough water to cover the skittles.

STEP 6

Observe!

STEP 7

Discuss what has happened to the colours.
Did they mix?
Did they stay separate?
Why do you think this happened?

STEP 8

Try different things!
Does warmer water
change the outcome?
What about the shape
of the container?







EXPERIMENT 3

Water Displacement

Volume is how much space something takes up. If we place an item into a glass of water, we can measure the volume of the item by how much water is displaced, or moved, in the glass.

What you will need:

- Drinking Glass
- Marbles
- Texta

STEP 1

Start by seeing how water displacement works. Fill a glass halfway with water and mark the water level with a texta.



STEP 2

Choose a waterproof object, like marbles, and place a few in the glass, noticing the change in the water level. (Try not to splash! The measurement won't be accurate!)



STEP 3

Discuss the change in water level and mark the new level with a texta.



Measure the difference in levels with a ruler and write down the result.
Why did the level increase?



STEP 5

Experiment with different containers. Why are there different measurements for different shaped containers?



STEP 6

Discuss the results and Clean up!







EXPERIMENT 4

Salt Water Density

When salt is added to water, it increases the mass and makes the water more dense. How will this affect items placed in the water?

What you will need:

- Drinking Glass
- Egg
- Salt



STEP 2

Find an egg and ask: What will happen when we place the egg in the water?

STEP 3

Place the egg in the water and discuss the result.

STEP 4

Fill another glass halfway with warm water and stir in 3 tablespoons of salt.

STEP 5

Take an egg and ask: What will happen when we place the egg in this water?

STEP 6

Place the egg in the water (this second egg should float!) and discuss the result.

STEP 7

Use the same objects you used in Experiment
1: Sink or Float and see what happens in the two glasses.

STEP 8

Add more or less salt to other glasses of water and see if this changes the results.

STEP 9

Discuss the results and Clean up!







EXPERIMENT 5

Water Absorption

Gather different items from around the house and predict what will absorb or repel water.

Why do some materials soak up water and others do not?

What you will need:

- Various waterproof items
- Food colouring
- Bowl

STEP 1

Hunt around the house for items to test, making sure they are waterproof items and nothing will be damaged. Things like: paper towel, plastic wrap, aluminium foil, cardboard, cotton balls etc.

STEP 2

Fill a bowl of water and add food colouring so it is easier to see the absorption. Try different colours if you have a variety at home.

STEP 3

Predict which items will absorb or repel water.

STEP 4

Using a dropper, or a straw will work too, drop water onto each item.

STEP 5

Observe how the object reacts and discuss the results. Were the predictions right?

STEP 6

Try dipping the object in the bowl of water, this would help items like the cardboard become more absorbent than simply dropping water on it.

STEP 7

Discuss the difference between dropping water on top and soaking it in the bowl. Did that change the results?

STEP 8

Clean up!



