

# WATER CYCLE IN A BAG



First watch our film to learn all about the [Water Cycle](#), then try this experiment to make your own water cycle in a bag. You can click on the triangle on the web page to listen to our relaxing evaporation music while you work!

You need a small clear plastic bag for this experiment; its a great chance to reuse an old sandwich bag or freezer bag, or you could use the packet from inside a box of cereal (just chop the top off to make it a bit smaller!)



## What you will need:

- Water
- Blue food colouring or ink (optional)
- A cup or small container
- A permanent marker pen
- Strong sticky tape
- A small clear plastic bag

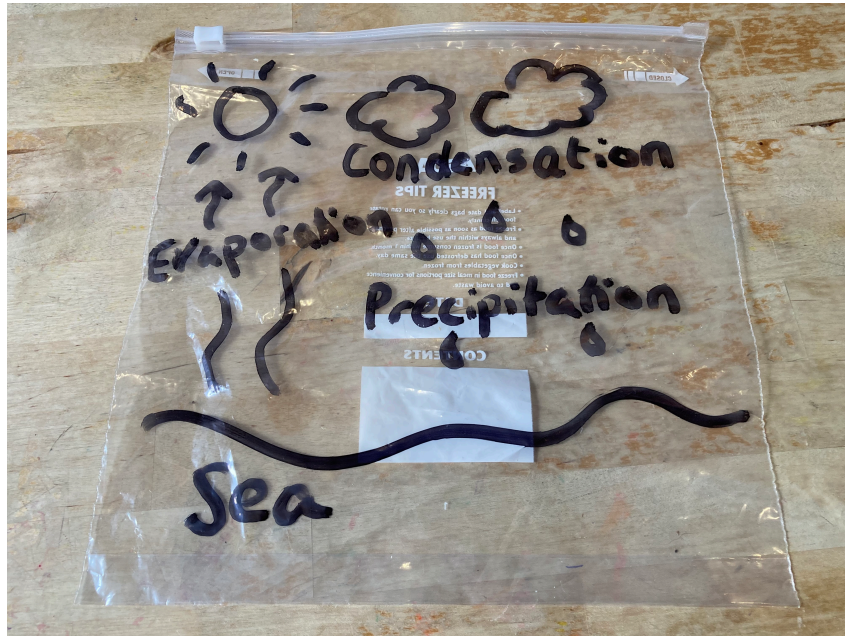
## Method:

1. Put some water in the container, add a few drops of blue colouring (if you are using) and mix together.

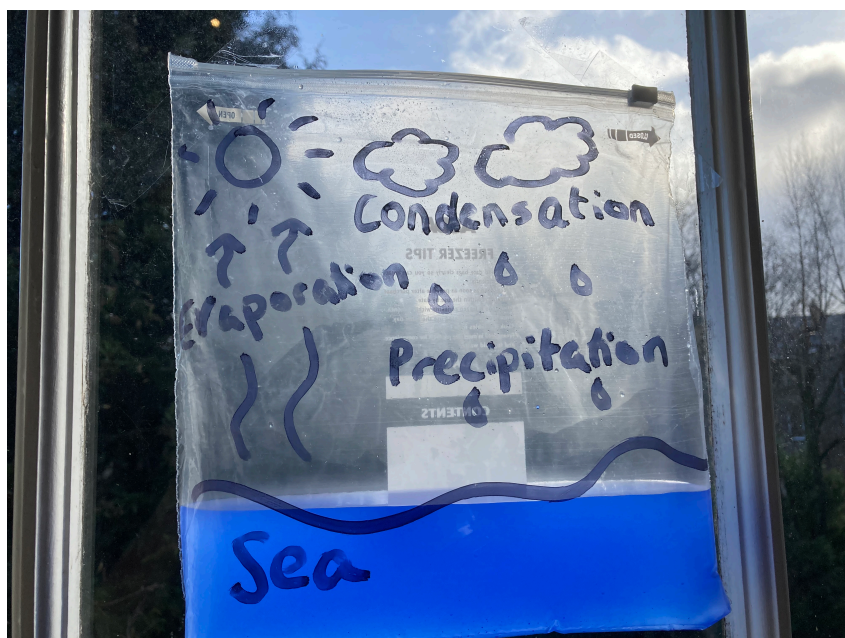


2. Use the marker pen to carefully draw clouds, sun and sea on your bag. You can label your drawing with the water cycle arrows and words:

**Precipitation      Evaporation      Condensation**



3. Pour some of the blue water into your bag so it is about a quarter full, then carefully seal it using the zip lock, or by folding over the top a few times and taping shut with sticky tape.  
(TOP TIP: Don't put in too much water or your bag will be too heavy!)
4. Tape the bag onto a window where the sun will shine on it. Make sure you have done this carefully so it will not fall off!
5. Leave the bag taped to the window and watch what happens.



You might have to wait for a few **hours** or a few **days** depending how hot it is. The sunnier and warmer it is, the quicker you will see the water cycle in action!

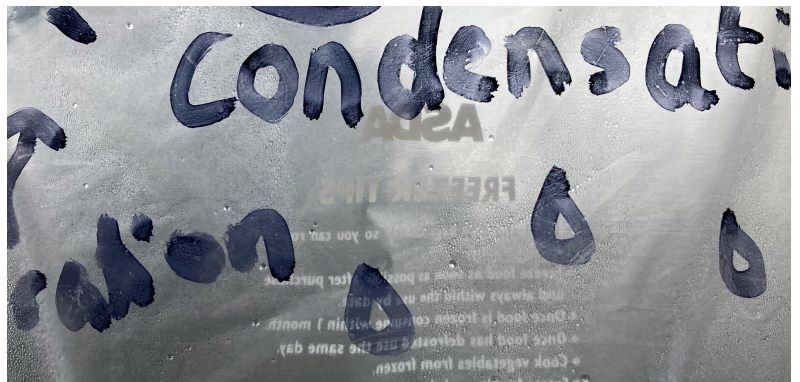
## What do you see happening?

The blue water represents the salty sea. When the sun heats it up, the water turns into a gas (water vapour) and rises to the top of the sealed bag. This is **EVAPORATION**.

Can you see your bag turning **foggy** from the water vapour?

When the water vapour hits the sides of the bag and cools down it turns back into liquid water droplets.

This is **CONDENSATION**.

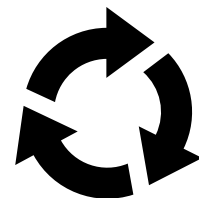


Can you see **droplets** forming on the sides of your bag? (Notice they are **clear** because the food colouring has evaporated away - just as salt evaporates from sea water)

As the water droplets grow larger and heavier they begin to **fall back down** into the bottom of the bag (just like rain).

This is **PRECIPITATION**. Can you spot this happening?

**Then the cycle begins all over again!**



**CONGRATULATIONS!** You've completed the experiment.

It's amazing to think that **all the water on Earth has been here since our planet formed**, it just goes round and round the water cycle like the water in your bag!

Remember to use your plastic bag as part of a cycle too, by giving it a rinse and **reusing** or **recycling** it!

