

Water, water everywhere...

Activities for children aged 5–7 years

WWT has a well-established and well-loved education programme that we run across the UK at our ten wetland sites. We've designed these short activities based on one of our school activities. We've made it to connect you and your family to the natural world and help you to work with your children to feel great about nature and understand some of the things that WWT love and care about.

Why wetlands?

WWT works across the UK to save, conserve and build wetlands for wildlife and people. Wetlands are one of the most important habitats on earth – storing huge amounts of CO₂, providing a natural way of stopping flooding and serving as a home for huge numbers of different creatures.

This activity will help you and your children to discover the importance of water and what we can do to save it.

These activities link to the National Curricula for science and geography in England, Northern Ireland, Scotland and Wales.

Stuff you need:

- Watering can (or other container)
- Chalk
- Ice
- A glass
- A second glass or the bottom half of a clear plastic bottle

Note: Where you see a **Q** this indicates a question to ask your child

Indoor activities

(45 minutes broken down into manageable chunks)

Section 1: What do we use water for?

(15 minutes)

Q Can you think of anything that humans and other animals can't live without?

- Your child might come up with air, oxygen, food etc. If they haven't come up with water, tell them that all animals need water to survive. Without water there would be no life on earth.

Q How many different uses of water can you think of?

- It might help if you prompt them to think of the different uses of water...

...in the **kitchen**.

...in the **bathroom**.

...in the **garden**.

- Get them to list as many as they can and add any others that you can think of.

These might include:

| Uses of water in the kitchen | Uses of water in the bathroom | Uses of water in the garden |
|--|---|--|
| <ul style="list-style-type: none"> - Washing up - Dishwasher - Washing machine - Cooking - Drinking - Cleaning | <ul style="list-style-type: none"> - Having a bath - Having a shower - Washing hands / face - Brushing teeth - Flushing the toilet | <ul style="list-style-type: none"> - Watering plants - Having fun (e.g. water fights, paddling pool etc) - Putting water out for wildlife |

Section 2: Changes of state

(2 x 10 minutes)

Preparation stage

For these activities, you will need to carry out some preparation and then come back to the activities a few hours later. You could complete the saving water activity (see below) between times.

Pour some water into a glass or the bottom half of a clear plastic bottle cut in half.

- Mark the level of the water on the outside.
- Leave in a window or other warm place.

Activity stage: Melting

- Take an ice cube or piece of ice from around the edge of your freezer. Place it in a glass.

Q What do you think will happen to the ice? Why?

- Watch the ice beginning to melt and explain that it is changing from ice (solid) into water (liquid). This is called melting.

Key word: MELTING

When a material changes from a solid to a liquid.

Q Can you think of any other examples of melting?

- Examples might include chocolate, an ice cream or ice lolly.

Activity stage: Evaporation

- Look at the glass of water you left in the window.

Q Has the level gone down? Why?

- Explain that as water heats up, it changes from a liquid to a gas. This is called evaporation. Some of the water (liquid) has changed into water vapour (gas) and gone into the air.

Key word: **EVAPORATION**

When a material changes from a liquid into a gas.

Activity stage: Condensation

- Fill a glass with water from a cold tap. Add some ice.
- Leave it for a couple of minutes.
- Feel the sides. After a while, you should be able to feel (and often see) a thin layer of water on the outside.
- Explain that this is condensation. Some of the water vapour from the air in the room has touched the side of the glass, cooled down and changed from water vapour (gas) into water (liquid).

Key word: **CONDENSATION**

When a material changes from a gas into a liquid.

How old is water?

- Water has been on earth for 4.6 billion (4,600 million) years! The dinosaurs lived between 230 and 65 million years ago, so water was around long before the dinosaurs roamed the earth.
- We don't get any new water on earth. It is the same water that has been going round and round for 4.6 billion years. This means that the water you drink may have passed through a dinosaur! Don't worry though, every time water evaporates all the nasty stuff in it is left behind so it naturally gets cleaned. Isn't nature amazing?

Section 3: Saving water

(10 minutes)

- Saving water is good for us and good for the environment.
- Get your child to look back at the list of uses of water they created earlier.
- Get them to make a list of different ways of saving water. It might be helpful to think of saving water in the kitchen, bathroom and garden as before.

These might include:

| Saving water in the kitchen | Saving water in the bathroom | Saving water in the garden |
|---|--|--|
| <ul style="list-style-type: none">- Wait until the dishwasher and washing machine are full before putting them on.- Wash fruit and veg in a bowl rather than under a running tap.- Have a jug of water in the fridge to save waiting for the tap to run cold. | <ul style="list-style-type: none">- Don't leave the tap running while brushing your teeth.- Have a short shower rather than a bath. | <ul style="list-style-type: none">- Only water plants when they really need it.- Water plants first thing in the morning or in the evening when less of the water will evaporate.- Use a watering can rather than a hose.- Install a water butt to collect rain water from your drain pipes and use this water for your plants. |

- Discuss with your child which of these would be easiest to do as a family.
- Make a pledge sheet as a family, showing the things you will do to save water. Display it somewhere where the whole family will see it regularly.

Take it outside:

(45 minutes+)

- Find an outside area with a hard surface (e.g. tarmac or concrete).
- If it has rained recently find a puddle.
- If not create a puddle using water from a watering can or a cup.
- Draw a chalk outline around your puddle.
- Every half an hour, go back to the puddle and again chalk the outline. You should see the puddle getting smaller over time.

Q Where do you think the water has gone?

- The water has evaporated just like the water you left in the window. Water is constantly evaporating and condensing. Isn't nature amazing!



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Have fun and do share your work to our social media accounts – we'd absolutely love to see it!