

Teachers, parents, carers and anyone interested - activities and information for you!

As well as our project website, there is also a wealth of great - and free! - resources to check out online. Here are just a few of our favourites:

Websites

<http://www.kidsgoglobal.net/the-issues/water>

Today, 1 billion people live without clean drinking water. Water affects everything including education, health and poverty. This website not only explores the issues of the global water crisis but it also has a wealth of activities and resources for you to explore. We particularly like all the interactive games reinforcing the use of water on this website:

<https://www.oxfam.org.uk/education/resources/water-week>

Oxfam Water Week for Schools provides opportunities for young people to learn and think critically about water issues, before taking informed and meaningful action. It can be undertaken at any time of the year.

<https://www.natgeokids.com/uk/?s=water+wiz+interactive+water+quiz>

National Geographic Kids has some very interesting information about water usage and plastic pollution, as well as lots of engaging, interesting articles, activities and quizzes to keep your children amused for hours.

<https://www.wateraid.org/uk/get-involved/teaching/ks2-resources>

Excellent set of teacher resources, including lesson plans, PowerPoints and fundraising activities for the whole school.

<https://friendsoftheearth.uk/plastics>

Friends of the Earth have created a fantastic page, crammed full of all you'll need to know about the plastic pollution problem, providing very useful, proactive ways of using less plastic in your everyday lives. If you would like to be more vocal with your opinions, then this site suggests ways in which you can get your views listened to by those in authority.

<https://www.plasticpollutioncoalition.org/blog/2018/5/3/how-to-talk-to-your-kids-about-plastic-pollution-cartoons-books-and-activities-to-involve-the-whole-family>

This website has been compiled by the PlasticPollutionCoalition and provides a variety of ways on how to talk to your kids about plastic pollution, through cartoons, books, and activities to involve the whole family.

What Can We Do At Home?

Water Usage

1. Water Saving Warriors – have you ever wondered if you could be more ‘water wise’?

<https://www.energysavingtrust.org.uk/sites/default/files/reports/AtHomewithWater%287%29.pdf> – very useful information on how we use water at home

Try the Water Saver Survey at the end of this information sheet...

Would you like to save water and save money at the same time? Here are some water saving tips for you to try:

<https://www.stwater.co.uk/wonderful-on-tap/save-water/you-can-make-a-difference/>

and water saving products to help you around the home

<https://www.stwater.co.uk/wonderful-on-tap/save-water/free-ways-to-save/>

2. Key Stage 2 Water Cycle Explanation - <https://www.bbc.com/bitesize/articles/z3wpp39>

3. Simple Science Experiments that you can complete at home, which demonstrate different parts of the water cycle:

Rain Cloud in a Jar Experiment – Appendix 2

Water Cycle in a Bag – Appendix 2

The Plastic Pollution Problem – How Can We Help?

Did you know that:

**Every second 160,000 plastic bags are being produced*

by the end of this year 5 billion bags will have been produced! 5 million of these will make their way to the oceans

Currently only 1 % of all plastic bags are being recycled

More than one million bags are used every minute

(these are just a few!)

This website is a great way to check and improve your knowledge of the environment, recycling, and reducing pollution. Your whole family can act as detectives, who need to solve riddles to protect the environment. The web page includes several printable colourful PDF documents with the tasks and hints you must follow to solve the case and protect the planet:

<https://www.epa.gov/students/planet-protectors-activities-kids> - Planet Protectors - Activities for Kids

LOOK at what Friends of the Earth is doing to “**Put a STOP to pointless plastic being produced**” – sign up and petition:<https://act.friendsoftheearth.uk/protest/ask-environment-secretary-act-end-plastic-pollution>

What else could you do?

- Support a new law to phase out non-essential plastics
- Use reusable bags for your groceries
- Get a reusable bottle and coffee cup
- Wash your clothes at low temperatures

Clean Water – Everybody’s Right

<https://www.dropinthebucket.org/about/>

A drop in the Bucket is a non-profit organisation building water wells and sanitation systems in schools in Africa, enabling youth to fully harness the life-changing power of an education.

This site gives you a wide variety of ideas for how you can donate to the cause and build a well, from Donate Your Birthday to Start a Fund Raiser

<https://www.wateraid.org/uk/get-involved>

Water Aid would like you to get involved by challenging yourself and your family to help the cause. There are many ways you can do this, so have a look at their ideas on the website.

Hey You! Not down the loo!

It’s really important that we make sure that all our fats, oils and greases – FOG - don’t go down the sink, so why not have a go at making your own Fat Trap to collect all this unwanted fat.

Make your own Fat Traps - <https://www.stwater.co.uk/content/dam/stw/my-severn-trent/documents/activity-sheet/Make-your-own-fat-trap.pdf>

Did you know that if you add in nuts and seeds to the hardened FOG, you can use it as Fat Balls to feed the birds with in the Winter months

It’s Gr8t To Hydrate

REFILL APP – Find out what this is all about-<https://refill.org.uk/>

Want to reduce the amount of single use plastic that you consume? The REFILL Initiative will inform you just how FREE and easy it is for the whole family to stay hydrated when you are out and about.

Would You Know If You Were Hydrated?

“1 to 3 is healthy pee, 4 to 8 you need to hydrate”



Signs and Symptoms of dehydration you may want to know, along with other interesting information and imaginative ways to enjoy drinking water daily:

<https://www.naturalhydrationcouncil.org.uk/hydration-facts/>

Water Cycle in the Bag

Model Activity

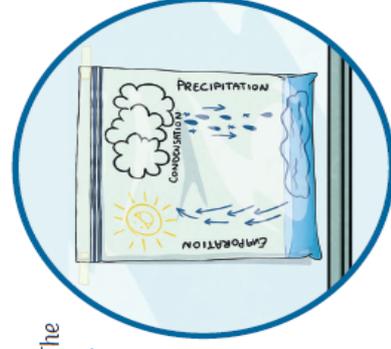
You will need:

- Sealable plastic sandwich bag
- Permanent markers
- Tape
- Water
- Blue food colouring
- Window with exposure to sunshine

Instructions:

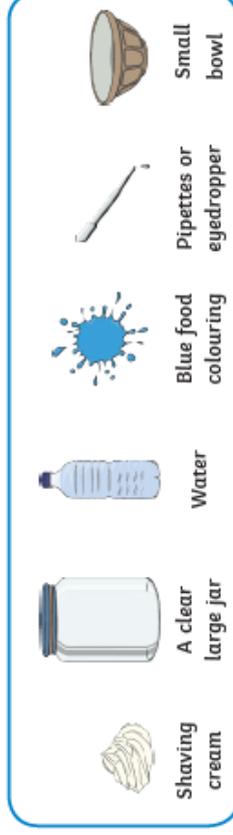
1. On the plastic sandwich bag, draw a diagram of the water cycle.
Be sure to include:
 - a. sun
 - b. clouds
 - c. water accumulation (at the bottom of the bag)
2. On the plastic bag, draw arrows and labels for:
 - a. evaporation
 - b. condensation
 - c. precipitation
 - d. accumulation
3. Fill approximately $\frac{1}{4}$ of the bag with water.
4. Place 2 drops of blue food colouring into the water.
5. Seal the bag.

6. Tape the sealed bag onto the window. The window will need to have plenty of sun hitting it to show the process of the water cycle.
7. Allow the bag to be in direct sunlight for about an hour, then observe the process in the bag and identify the different stages of the water cycle.



Rain Cloud in a Jar

You will need:



Method:

1. Fill the large jar with water, leaving 2 inches at the top.
2. Add the shaving cream to the top of the water until it reaches the top of the jar.
3. Next, add 1 cup of water to the small bowl and 3 drops of blue food colouring.
4. Mix the water and food colouring together.
5. Use the pipette to add drops of the water mixture to the top of the shaving cream cloud.
6. Continue adding the water mixture until you begin to notice the raindrops begin to break through the bottom of the cloud.



Home Water Use Audit

Calculate your daily water usage as well as the usage of your family members. Record how many times/day your family completes each activity. Multiply that amount by the quantity of water using normal practices and conservation practices. Total both the Normal Water Usage amounts and the Water Conservation Usage amounts at the bottom of the chart.

Activity	# of times/day	Normal Water Usage Description	Amount of Water Used	Total	Water Conservation Usage Description	Amount of Water Used	Total
Flushing Toilet		Using a regular toilet	14 L		Using a low flow toilet or displacing water with a 2L pop bottle	6 L	
Taking a Shower		Using a regular showerhead, having a long shower	100 L		Using a low flow showerhead, taking shorter showers	60 L	
Taking a Bath		Filling the bath $\frac{3}{4}$ full	150 L		Filling the bath $\frac{1}{2}$ full	70 L	
Brushing Teeth		Leaving the tap on while brushing	14 L		Turning the tap off while brushing	2 L	
Drinking Water from the Tap		Running the tap until water is cold	5.5 L		Keeping a jug of water in the fridge to keep water cold	.05 L	
Handwashing Dishes		Leaving the tap on while washing	110 L		Turning the tap off while hand washing	22 L	
Dishwasher		Using the long cycle	47 L		Using the short cycle	32 L	
Car washing		Leaving the hose running	400 L		Using buckets instead of the hose	100 L	
Watering the Lawn		Watering the lawn in the middle of the day	35 L/min		Watering the lawn in early morning or late evening	18 L/min	
TOTALS			Normal Water Usage		Water Conservation Usage		

How much water could you save by using water conservation practices around your home?

Subtract the Total Water Conservation Usage from the Total Normal Water Usage

How much money could your family save by using the water conservation practices?|

- 1 Cubic Metre = 1000 L
- 1 Cubic Metre of water costs \$ in Chatham-Kent

Divide your Total Normal Water Usage by 1000 L to calculate the water usage in cubic metres. Multiply that number by the cost per cubic metre. Repeat the same process for the Total Water Conservation Usage. Subtract the cost of the Total Water Conservation Usage from the cost of the Total Normal Water Usage.