

Topic	Objectives	Lesson starter	Activities	Challenge/Project
Session 1  Water in the world.  The Water Cycle.	To know that water on earth exists as saltwater and fresh water.  To understand key features of the Water Cycle.  To be able to list different of forms of fresh water.	Power point: Explaining earth's water distribution.	Video: Water cycle video. Activity sheet: Water cycle diagram and labels. Video/ Investigation: Water cycle experiment.	Activity sheet/Investigation: Make a rain gauge and measure the rainfall over the next 3 weeks. (Also needed for session 4)  Activity sheet/Art: Grow your rainbow.  Literacy/Music: Write your own rap to explain the water cycle and perform for your family.
Session 2  How do we clean the water? (Water treatment process) and Anglian Water's role in it.	To understand that water needs to be cleaned before drinking it.  To have an understanding of the cleaning process.  To understand water quality is very important, regularly tested and high quality in our taps.  To be able to carry out a simple filtration process.	Online video: Water process.	Video: Water treatment process.  Activity sheet: Water treatment process label diagram.  Activity sheet/ Investigation: Filtration activity.  Video/ Investigation: Look, smell, taste test - can your grownups spot the tap water?	Art/design: Design a poster/advertising campaign to highlight the high quality of tap water.  Research: Investigate the WaterAid website. What is the process for cleaning water in other countries?



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Session 3  Water use in your house.  Measuring the water, you use. (water audit)  Finding water meter data.	To understand that water is vital to life and is used for more than just drinking.	Online video: How to find your water meter?	Investigation: Adult help needed - Get your grown-up to read your water meter - record the number and see how much you use each week.  Activity sheet: Identify all the places where water is used in your home (shower, washing machine, toilets etc.).  Activity sheet: Create water diary audit to record water used (minutes in shower, number of times taps turned on etc.). Continue diary for 3 weeks  IT/Investigation: Create a spread sheet to record weekly:  1. Water diary audit data 2. Water meter data	Research: Investigate your water footprint. What is hidden water?  Make a quiz for your family about Hidden Water - how much water is used to make a car? Jeans? A loaf of bread?



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Session 4 Being Waterwise	To know a range of ways to reduce water consumption.  To understand there are real pressures on the amount of clean water available to use.	Video: Waterwise - Why we need to become water wise.	Research: What climate or water challenges are there in the Anglian Water region? Review: Make a graph of the rainfall data for your garden that you have collected over the past few weeks or research rainfall for past 6 months.  Video: Waterwise. Investigation/art: Design a water saving device. Use junk to make a model.  Online APP/audit: Check your water meter and play the App or update your data graph.	Presentation: Create a pitch for your water saving device, like on Dragons Den and present to your family.  Online APP: Test Water App - Water Battle with your family. Be a reviewer for us.  IT/Investigation: If you can't use the APP use Excel or create own data graphs to record your audit and water meter data.



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Session 5 Too much water.	Understand that weather patterns can fluctuate.  Know the issues caused by too much rain.	Images of flooding/videos.	Research: How houses are designed to be protected from flooding in other parts of the world.  Design: A house or town that can adapt to flooding. A house on stilts/ one that floats? What is it made from?  Annotated diagram  On-going Investigations: Don't forget to check your water meter / audit and record your data.	DT: Build a model of your house from junk.
Session 6	To assess and review your use of water.	On line video: Doing our Bit. The Water App	Video: Doing our bit.  Review: Has playing the App and learning about water made you more water wise? – compare your water use with lesson 3. Create a cartoon/story board showing how your family use water/have changed their water use  Review Do you like the App? Etc. Write a review. Design a poster to advertise the APP.  Review: Graph of your water use and/or water meter data. Share your findings with your family.	Online APP: If you have played the Water App with your family write a review for us.  Art/DT: Create a water wise information guide (PowerPoint/ Poster/ funky facts - you decide).

STEM from Anglian Water: explore the world of water and love every drop



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Session 7  What happens to the stuff you flush away?	To know that the treatment of sewage, before it goes back to the water cycle, is a natural process using, settlement, microorganisms and heat.  To be able to name parts of the sewage treatment process.  To discover microorganisms using video, name and draw them.	Video: Water recycling process on Education video.	Activity sheet: Labelling WR process/ or draw own diagram and label.  Video: Microbes and what they do for us.  Activity sheet: Naming microbes.  On-going Investigations: Don't forget to continue recording rainfall.	Art/ DT: Make your own microbe - make sure it is detailed. Junk modelling/ etc.
Session 8  You put what down the toilet?	Understand that different materials have different properties.	Lotte's vlog video.	Investigation: What happens to wipes, toilet paper, kitchen paper towel and newspaper when you put them in water?  Activity sheets: Find out all about how to keep the sewers free from blockages.  On-going Investigations: Don't forget to continue recording rainfall.	Literacy: Create a leaflet to share Keep It clear messages with your family. (select your audience).

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Session 9  Water for wildlife. In the garden and the environment	To know the role Anglian water plays in protecting the environment.  To know that all living things need water.  To understand key features a water animals life cycle.  To be able to list different freshwater creatures.	Online video: Ingoldisthorpe_Natural Wetland	Activity Sheet: Plant investigation  Video: Virtual Pond Dipping.  Activity sheet: Pond animal ID sheet and Pond Health Score.  Activity sheet: Dragonfly life cycle	On-going Investigations: Make a graph of the rainfall data for your garden that you have collected over the past few weeks.  Activity sheet: Watering plants. Make a drip feeder for plants using milk containers.  Investigation: Plant 2 seeds. Water one regularly and not the other one and compare.
Session 10 Water for Wildlife. Birds.	To understand that birds use our water sources for their habitat.  To be able to identify some different birds from your home and garden as well as our reservoirs.  To be able to observe and draw a bird.	Online research: Our Reservoirs and water parks	Video: Wetland birds virtual birdwatching.  Video: Garden birds virtual birdwatching  Activity sheet: Identify the garden birds you have seen.  Investigation: What birds do you see in your area?	Art: Draw a bird that you see.  Research: Watch the osprey webcam.  DT Activity sheet: Make a bird bath.



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Session 11 Water for Wildlife.	. To understand that minibeasts have different habitats	Online Video: Virtual Bug Hunt.	Activity sheet: Bug hunt ID sheet and classification into herbivore, carnivore, detritivore.	Art: Painting, mosaic or college of a bug you see.
It's a Bugs Life.	To be able to identify some different minibeasts from your area as well as our reservoirs  To understand the key features of a butterfly life cycle		Activity sheet: Butterfly life cycle	Research: Find out about the Big Butterfly Count.  Investigation/Design: Design and build a bug hotel and record minibeasts. Investigate how each of the minibeasts in your hotel need water?
Session 12 What I know		List all the things you can remember learning about/ the things that made you go wow or Um.	Design and make a board game that shows all you have learnt.	Play with everyone in your house.