**Year 4 Geography Curriculum – Spring Term**

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| **Theme: The Water Cycle** |
| **Curriculum objectives** | **Vocabulary** | **Links across the curriculum** |
| 1. Human and physical geography: describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.
2. human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.
3. use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies
 | **Keyword** | Definition  | **Water cycle** | the process by which water is continuously transferred between the surface of the earth and the atmosphere. | **PSHE** – citizenship and personal hygiene.**History –** plumbing and safe water **Science –** states of matter |
| **borehole** | A borehole is a narrow shaft bored in the ground, either vertically or horizontally, made when looking for oil, gas, or water | **drain** | a channel or pipe carrying off [surplus](https://www.google.com/search?sca_esv=587611622&rlz=1C1GCEU_en-GBGB1069GB1073&sxsrf=AM9HkKnZoDyQDwFp0Xp1AK8hvTh40jHSzQ:1701683478858&q=surplus&si=ALGXSlZCBshTM3a3nPTSW0d1OmQexX3yaNqxS0AsV72aWw88YYARwZNklSwZt-FlaKVRYlMPY_gxNOTpu8uG2oNgHxzPTwOmog%3D%3D&expnd=1) liquid, especially [rainwater](https://www.google.com/search?sca_esv=587611622&rlz=1C1GCEU_en-GBGB1069GB1073&sxsrf=AM9HkKnZoDyQDwFp0Xp1AK8hvTh40jHSzQ:1701683478858&q=rainwater&si=ALGXSlYl_e3TsZvERASNGAvnwCgj81686f5LB34bCyK4W2u2xXNyb7pjPlLIt2oPABkzeSg9Aqdh6z5VEDyHDbYd4uIvnx6e2EP3m0EdHBATh4Elv57zNg0%3D&expnd=1) or liquid waste. |
| **flood** | An overflowing or irruption of a great body of water over land not usually submerged; an inundation, a deluge. in flood | **Solid** | A fixed state of matter seen in water as ice. |
| **Water butt** | a large barrel used for catching and storing [rainwater](https://www.google.com/search?sca_esv=587611622&rlz=1C1GCEU_en-GBGB1069GB1073&sxsrf=AM9HkKmh1aiB9R-CzttyjsjHDnBlGQlnxw:1701682751330&q=rainwater&si=ALGXSlYl_e3TsZvERASNGAvnwCgj81686f5LB34bCyK4W2u2xXNyb7pjPlLIt2oPABkzeSg9Aqdh6z5VEDyHDbYd4uIvnx6e2EP3m0EdHBATh4Elv57zNg0%3D&expnd=1). | **Liquid** | A moving state of matter seen in flowing water. |
| **waterworks** | an establishment for managing a water supply. | **Gas** | A airborne state of matter seen in water vapour. |
| **condensation** | the change of the [state of matter](https://en.wikipedia.org/wiki/State_of_matter) from the [gas phase](https://en.wikipedia.org/wiki/Gas) into the [liquid phase](https://en.wikipedia.org/wiki/Liquid), particularly within the [water cycle](https://en.wikipedia.org/wiki/Water_cycle). seen with the change in the state of water vapour to liquid water. | **Reservoir** | a large natural or artificial (man-made) lake used as a source of water supply. |
| **precipitation** | is any product of the condensation of atmospheric water vapor that falls from clouds (seen within the water cycle as drizzle, rain, sleet, snow, ice pellets, graupel and hail.  | **Well** | is an excavation or structure created in the ground by digging, driving, or drilling to access liquid resources, usually water. |
| **evaporation** | the process of turning from liquid into [vapour](https://www.google.com/search?sca_esv=587611622&rlz=1C1GCEU_en-GBGB1069GB1073&sxsrf=AM9HkKlyq9FSph3bEDV2Ljxmq0JKSve0lQ:1701683367612&q=vapour&si=ALGXSlZs_yOcjbcvFwhB4E04oe9YCIFeNdNY98B332P3TG6ihWrkulUJKJoam0y6ubf3KgNZhsKaoQd1-zvCjA8RxndNKPe5yw%3D%3D&expnd=1), seen in the water cycle as liquid water to water vapour. | **Water tank** | is a container for storing water, for many applications, drinking water, irrigation, fire suppression, farming, both for plants and livestock. |
| **Prior Knowledge:**Understanding the World- EYFSHot and Cold Places- Year 2 | **Future Knowledge:**North America and Sustainability- Year 6 |
| **Lesson Sequence** | **Key Knowledge** | **Key Skills** |
| 1. How does water affect our lives?
 | * Water is a key natural resource.
* Without water there is no life.
* Earth has an abundance of water (approx. 71% of the Earth is covered in water) unlike other planets in our solar system where astronauts are searching for its presence in space exploration.
* Water is used on a daily basis: washing hands, washing clothes, bathing, flushing toilets, drinking, brushing teeth, cleaning and cooking.
* Water is sometimes unwanted and dangerous such a flood water damage.
 | * To explain and recall uses of water on a daily basis.
* Record different uses of water and reason the important part water plays in our lives.
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| 1. Where does water come from?
 | * Water come from different places and can be found in various forms: such as solid forms of ice or snow; a transparent liquid or it can be an invisible gas.
* Most of the <70% water found on earth is seawater and cannot be used for drinking or irrigation as it is contaminated with salt.
* Freshwater is more scarce and may also be stored in frozen deposits of snow and ice such as in Antarctica and Greenland.
 | * Discuss natural sources of water in the world
* Locate water in oceans/seas on a globe
* Compare and contrast the differences and uses of freshwater and saltwater.
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| 1. How does temperature affect water?
 | * Temperature affects the state of water; how it appears and acts.
* There are three states of matter: solid, liquid and gas.
* Water can be solid (ice), liquid (water) and gas (water vapour).
* Water as a vapour in condensation can be found on windows.
 | * Discuss how water is found in different forms.
* Observe and record water in different states of matter.
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| 1. What does the water cycle mean?
 | * Water changes as it warms and cools. The heat of the Sun turns liquid water on the land and sea into gas.
* As gas rises into the atmosphere, the drop in temperature eventually causes this gas to condense as water particles creating clouds.
* When clouds become too full, water particles fall back to Earth as rain.
* This process of heating and cooling works in a cyclical and is therefore repeated continually.
 | * Recall how temperature affects the state of water.
* Sequence the stages of the water cycle.
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| 1. Where does our water come from?
 | * Water is a precious resource and in many parts of the world it is not as easily accessible as in the UK.
* Reservoirs store water that comes into our homes through pipes.
* Water supplies have 4 stages in which they come to our homes: first pumped from a river, lake or borehole, then sent for purification and treatment in a water works, next it is sent to a reservoir or water tower before finally reaching houses via plumbing and taps. Pipes are the links between these processes.
 | * Synthesise how water we use on a daily basis has followed a process to reach us.
* To sequence the 4 stages of water from river to taps in our homes.
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| 1. How can we improve water supplies?
 | * There are many ways in which we can improve water supplies such as: installing pipes linked to fresh water sources, harvesting rain in tanks and storage jars, building dams across streams and rivers, digging new wells to access supplies of ground water.
* Many charities work in developing countries to improve water supplies and access to clean, safe water such as Oxfam, Save the Children, WaterAid, Christian Aid and CAFOD.
 | * Research a charity that improves water access and how this impacts communities.
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| **Themes and links** |
| **Geography themes** | **Where these are covered:** | **Links across the Geography curriculum** |
| **Space and scale** | * Lessons 1, 4, 5 and 6
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| **EYFS** | Understanding the world |
| **1** |  |
| **2** | Hot and Cold places |
| **3** |  |
| **5** |  |
| **6** | North America and Sustainability |

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| **Interdependence** | * Lessons 1, 2, 4, 5 and 6
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| **Environment and sustainability** | * Lessons 1, 2, 4, 5 and 6
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| **Cultural understanding and diversity** | * Lessons 5 and 6
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