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| **Alderley Edge Community Primary School** | | |
| **TOPIC: Water Cycle** | **Strand: Geographical processes** | **Year 4** |

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| **What should I already know?** |
| * **Evaporation** happens when water (a **liquid)** turns into water vapour (a **gas)** when it is heated. * **Condensation** happens when water vapour (a **gas)** turns into small water droplets (**liquid)** when it is cooled. * Plants **absorb** water through the soil to help them grow * Climate regions of mountains * Features of mountains and rivers |

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| **Geographical Skills and Fieldwork** |
| * Present what you know about the water cycle using a variety of skills using appropriate vocabulary. * Observe **evaporation** and **condensation** in action by using bowls of water and mirrors /glass. |

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| |  | | --- | | **The Water Cycle** | |  | | |  |  | | --- | --- | |  | **Vocabulary** | | absorb | soak up or take in | | atmosphere | the layer of air or other **gases** around a planet | | condensation | small drops of water which form when **water vapour** or steam touches a cold **surface**, such as a window | | evaporation | to turn from liquid into gas; pass away in the form of **vapour**. | | gas | a form of matter that is neither **liquid** nor solid. A **gas** rapidly spreads out when it is warmed and contracts when it is cooled. | | groundwater | water that is found under the ground. **Groundwater** has usually passed down through the soil and become trapped by rocks. | | liquid | in a form that flows easily and is neither a solid nor a gas. | | precipitation | rain, snow, sleet, dew, etc, formed by **condensation** of **water vapour** in the atmosphere | | runoff | rain in excess of the amount **absorbed** by the ground | | surface | the [flat](https://www.collinsdictionary.com/dictionary/english/flat) [top](https://www.collinsdictionary.com/dictionary/english/top_1) part of something or the outside of it | | transpiration | **evaporation** of water from a plant's leaves, stem, or flowers | | water vapour | water in the **gaseous** state, esp when due to **evaporation** at a temperature below the boiling point | |

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| **How Does the Water Cycle Work?** |
| * **Evaporation:** * The Sun causes the water from the Earth to **evaporate.** * This water **evaporates** from seas, lakes, streams and even puddles. * When it **evaporates,** water turns into **water vapour.** * **Condensation:** * As the **water vapour** rises, it cools down. * As it cools down, **condensation** happens and **water vapour condenses**  to small droplets of water. * Clouds are made from a mix of dry air and small droplets of water. * **Precipitation:** * As **condensation** continues to happen, more droplets of **water vapour** are formed. * When the droplets become heavy and large enough, they fall back to the Earth’s surface in the form of rain or snow. * **Runoff and Transpiration:** * As **precipitation** happens in the form of rain or snow falling back to Earth, water is **absorbed** into the soil. * This water is used by plants to grow - when water from plant leaves **evaporates** back into the **atmosphere**, this is called **transpiration.** * Water may also run off and enter oceans, seas and rivers. * Water then **evaporates** again and the water cycle begins again! |