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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**  |
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|  | **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!
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