07/25 – Version 1

# The Natural Water Cycle

## Learning Objectives

Students will:

- Understand how water moves through the water cycle.
- Critically reflect on the significance of the natural water cycle to our planet.
- Identify the processes of the natural water cycle.
- Develop an awareness that all water on Earth is recycled and continuously moving from the earth to the atmosphere and back again.

## Inquiry Questions

- Does water disappear?
- Is there ever new water?
- What are the processes of the natural water cycle?

| | |
|---|---|
| **Time** | Approx 60 minutes |
| **Curriculum Alignment** | **Science > Science Understanding > Levels 3 and 4**<br>**Science Understanding > Earth and Space Sciences**<br><br>Students learn:<br>- water is an important Earth resource that originates from various sources; water cycles through the environment by moving through the sky, landscape and ocean, and involves processes including precipitation, evaporation, transpiration, condensation, melting, freezing, crystallisation, infiltration and run-off.<br>VC2S4U07<br><br>- weather events and climate have impacts on the land, air, water and living things; human activity can affect climate.<br>VC2S4U08<br><br>**Humanities > Geography > Levels 5 and 6**<br>**Geographical Knowledge and Understanding > Management of places**<br>Students learn:<br>- how places and environments are changed and managed by people<br>VC2HG6K01<br>- the specific geographical and other characteristics that shape their place, how their place is changing and how change is managed<br>VC2HG6K03 |
| **Key Vocabulary and Terms** | • The Water Cycle<br>• Evaporation<br>• Transpiration<br>• Condensation<br>• Precipitation<br>• Ground Water |

| Teacher and Learning sequence | Resources |
|---|---|
| **<u>Orientation</u>:**<br><br>**Activity:** Where is the Water?<br><br>**Time**: 10-15mins.<br><br>**Purpose:** 'Minds on' to engage prior knowledge, develop context for new learning, and build a visual word/terms bank we can refer back to in the lesson.<br><br>Teacher led group/class brainstorm about where water 'lives'. Use a map of Victoria or Australia and the visual prompts slide to encourage students to identify places where we find water. | Slides (**Resource A**) are used to support all aspects of the teaching and learning sequence.<br><br>Map of Victoria (or Australia).<br><br>Visual Prompts Slide.<br><br>Record answers (on whiteboard etc) so they can be referred to later in the lesson. |
| **<u>Body</u>:**<br><br>**Activity:** BIG Questions<br><br>**Time:** 10-15mins.<br><br>**Purpose:** Encourage students to reflect on the following BIG Questions in order to deepen understanding of key aspects of the natural water cycle when they are introduced.<br><br>- Does water disappear?<br>- Is there ever new water?<br><br>The questions should be visible throughout a teacher led reading of story 'Rhythm of the Rain' – also supported by the slides. If you don't have the book, a video reading is included in the slides.<br><br>After reading, think about what happened in the story. What was significant about the story beginning and ending (Simon was playing in the pool?) This represents the 'endless' nature of the water cycle.<br><br>Revisit Big Questions. We now have an answer. | Slides.<br><br>*Rhythm of the Rain* by Graham Baker-Smith |
| **Activity:** Explain Water Cycle and Cloze Activity<br><br>**Time**: 10-15mins.<br><br>**Purpose:** Students discover the correct terms for describing the way water moves through the water cycle. Writing down the correct terms allows students to build confidence applying and contextualising them correctly.<br><br>Students complete both Part A and Part B as the teacher explains the features of each aspect of the water cycle. Use the supporting slides. The explanation can be enhanced by a physical map or geographic catchment demonstration model. | Cloze activity worksheet (**Resource B**) |
| **Activity:** Revisit and Reflect: Where is the Water?<br><br>**Time:** 5-10 mins.<br><br>**Purpose:** Reinforce learning by re-engaging with class generated water locations and connecting to new understanding. | |

| | |
|---|---|
| Consider these questions while doing so to deepen understanding:<br><br>- What parts of the water cycle interact with the water locations we thought about at the start of the lesson?<br>- Some of these locations are in our home – does that mean we are part of the Natural Water Cycle? | Revisit recorded answers from previously in the lesson. |
| **Activity**: Key Word Pictionary<br><br>**Time:** 5-10mins.<br><br>**Purpose**: Creatively process key terms from the water cycle in a fun and memorable way. Can be done in groups or as a class with volunteers.<br><br>- Evaporation<br>- Transpiration<br>- Condensation<br>- Precipitation<br>- Ground Water<br><br>This activity can be extended by having students generate the clues, and by using other vocabulary from the lesson. | Use '1 minute timer' in slides. |
| **Continue learning and extension** | **Resources** |
| **Activity:** Water Cycle in a Jar.<br><br>**Purpose:** Students can apply understanding of the natural water cycle via this experiment. See resource extract for detail. | Water Cycle in a Jar' – Page 26-27 extracted from 'Water. Learn it. Live it' (**Resource C**) |