Educational resources

Year 7-8: Science

The Water Cycle: natural and urban perspectives



Lesson overview, to be utilised in conjunction with **The Water Cycle: natural** and urban perspectives PowerPoint presentation

Curriculum links

Science / Levels 7 and 8 / Science understanding / Earth and space sciences - (VCSSU100)

Content description

• Some of Earth's resources are renewable, but others are non-renewable.

Elaborations

- Considering what is meant by the term 'renewable' in relation to the Earth's resources.
- Considering timescales for regeneration of resources.

Science / Levels 7 and 8 / Science understanding / Earth and space sciences - (VCSSU101)

Content description

• Water is an important resource that cycles through the environment.

Elaborations

- Considering the water cycle in terms of changes of state of water.
- Investigating factors that influence the water cycle in nature.
- Exploring how human management of water impacts on the water cycle.

Learning intentions

- To understand that water is a renewable source that moves in cycles.
- To consider the water cycle in terms of changes of states of matter.
- To investigate factors that influence the water cycle in nature.
- To explore how urbanisation and human management impact the water cycle.

Success criteria

- I can describe the flow of water in the natural water cycle.
- I can compare and contrast the natural and urban water cycles.
- I can outline who manages water in our water region.





Lesson overview

Using the supporting PowerPoint presentation: **The Water Cycle: natural and urban perspectives,** explore the content and discussion points as outlined below.

Slides 1 - 5:

Wannon Water information and introduction.

Slides 6 - 7:

Unpack the Learning intentions and Success criteria.

Slide 8

Lesson introduction - 'How does water move through our environment?' - discuss.

(Teacher prompt examples - ocean, rain, cloud, river, catchment. Could introduce technical vocab, e.g., evaporation, condensation, precipitation, transpiration, reservoir, etc).

Slide 9:

Whole class discussion - teacher led summary of the Natural Water Cycle diagram.

To assist with the exploration and discussions of content/diagrams on Slides 9 - 13, you can print/distribute the editable **Venn** and **Top Hat** diagram templates provided.

Slide 10:

Whole class brainstorm - 'What does urbanisation' mean?' 'How would this diagram look different in an urban environment?'

Slide 11:

Whole class discussion - teacher led summary of the Urban Water Cycle diagram.

Slide 12:

Compare and Contrast - Natural Water Cycle vs Urban Water Cycle.

- Observe and discuss the similarities and differences between The Natural Water Cycle and The Urban Water Cycle.
- Refer to the editable **Venn** and **Top Hat** templates.

Slide 13:

Students complete a visual organiser to summarise similarities and differences.

Slide 14:

Whole class discussion - teacher led.

- Discuss and highlight the additional factors in the Urban Water Cycle.
- What does this mean for human communities?

Slide 15:

Whole class discussion - teacher led.

 How does human management of water impact the water cycle?

Slide 16:

Discussion - What does Wannon Water do in our region?

- Students explore Wannon Water's website https://www.wannonwater.com.au/about-us/our-role/
- Students record dot point notes to summarise who manages water in our region and what they do.

Slide 17:

Share and reflect.

Slide 18:

For consideration, extension opportunities are provided.

