

## Water Lesson – The Cycle of Water

Grade	Subject & Unit	Sub-category	Specific Expectations
2	<b>Science &amp; Technology</b> Understanding Matter & Energy: Properties of Liquids and Solids	Relating Science and Technology to Society and the Environment	1.2 assess the impacts of changes in state of solids and liquids on individuals and society Sample prompts: Rain turns to sleet or freezing rain when the temperature near the ground is cold enough. Freezing rain makes walking and driving dangerous. If layers of ice build up on power lines, the lines can fall, leaving people without power to their homes
		Understanding Basic Concepts	3.3 describe the characteristics of liquid water (e.g., it takes the shape of the container it is in) and solid water (e.g., ice floats), and identify the conditions that cause changes from one to the other (e.g., water turns to ice when the temperature goes below zero; ice turns to water when heated)
	Understanding Earth & Space Systems: Air and Water in the Environment	Relating Science and Technology to Society and the Environment	1.1 assess the impact of human activities on air and water in the environment, taking different points of view into consideration (e.g., the point of view of parents, children, other community members), and plan a course of action to help keep the air and water in the local community clean  1.2 assess personal and family uses of water as responsible/efficient or wasteful, and create a plan to reduce the amount of water used, where possible

		Developing Investigation and Communication Skills	<p>2.3 investigate, through experimentation, the characteristics of water (e.g., water takes up space, flows or moves when not contained, has mass) and its uses (e.g., living things need water to stay alive; water makes things move: spins a water wheel; water makes certain activities possible: keeps a white-water raft afloat)</p> <p>2.4 investigate the stages of the water cycle, including evaporation (e.g., heat water in a kettle), condensation (e.g., collect the water vapour from the kettle on an overturned mirror), precipitation (e.g., allow the water vapour on the overturned mirror to collect, cool, and drop), and collection (e.g., let the dripping water accumulate in a container)</p> <p>2.5 investigate water in the natural environment (e.g., observe and measure precipitation; observe and record cloud formations; observe water flow and describe where it goes; observe a puddle over time and record observations)</p>
		Understanding Basic Concepts	<p>3.4 identify sources of water in the natural and built environment (e.g., natural: oceans, lakes, ponds, streams, springs, water tables; humanmade: wells, sewers,</p>

			<p>water supply systems, reservoirs, water towers)</p> <p>3.5 identify the three states of water in the environment, give examples of each (e.g., solid – visible as ice, snow, sleet, hail, frost; liquid – visible as rain, dew; gas – visible as fog, water vapour), and show how they fit into the water cycle when the temperature of the surrounding environment changes (e.g., heat – evaporation; cooling – condensation and precipitation)</p> <p>3.6 state reasons why clean water is an increasingly scarce resource in many parts of the world</p>

