



Water

Recommended year group: Year 7

Subject focus: English, Geography, RE, PD

Driving Question

Does water always 'win'?

Introduction

The Water theme introduces the scientific properties of water and examines how the behavior of water influences life cycles, physical landscapes and people's beliefs and ideas about the purpose of water on Earth. In this theme, students will study many of the processes on Earth in which water is involved. They will begin with water as a chemical that is recycled and supports life, forming a link between all aspects of the natural world, by investigating water's solubility, molecular structure and states of matter within the hydrological cycle. They will then examine water as a physical force that shapes landscapes and impacts life by describing a river's journey, defining glacial landscapes and evaluating water's role in maintaining ecosystems such as the coral reef. Students will then consider water as a source of comfort and aid, applying persuasive writing techniques to humanitarian questions. Students will also explore water as a religious symbol. Students will begin to question which has the most power – water or the life that it supports – by considering the Driving Question: Does water always 'win'?



Assessment outcomes

Lesson 2: Water solutions: SC.ES.01 and SC.PE.01

Lesson 3: Rivers: SE.GE.03

Lesson 4: Glacial environments: SE.GE.03

Lesson 5: Flooding: SE.GE.03

Lesson 6: Holy water and Baptism: SE.RE.03

Lesson 7: Big Read: *Blessing* by Imtiaz Dharker: RL.ID.03

Lesson 10: Coral reefs: SE.GE.03

Key vocabulary

accumulation advance anoint assonance atmospheric-deposition audience
Baptism bioaccumulation caesura carnivore ceremony channel Christian chiasm
climate compression commuting condensation confluence consumer
contamination coral cross Dharavi dissolve drainage-basin dredging ecosystem
embankment erosion ethical evaporation floodplain formal germination glaciers
global- warming gorges groundwater herbivore holy hydropower hygiene
imperative industrial-waste insoluble interlocking-spur irrigation levee marine-
dumping meander metaphor molecule mouth nutrients ocean oil overfishing
overhanging oxbow-lake percolation persuade photosynthesis pilgrimage
plunge-pool pollution precipitation priest producer rainfall repetition report
retreat river run-off sacred saturated sewage snout solubility solute solution
solvent source spring stanza stream simile substance tourism transport
transpiration tributary undercutting valley variables vegetation watershed

Flipped learning opportunities

- Lesson 1: What is water?
- Lesson 2: Water solutions
- Lesson 4: Glacial environments
- Lesson 7: Big Read: *Blessing* by Imtiaz Dharker – Homework task

Linked reading

Plasticus Maritimus an Invasive Species by Ana Pego

20,000 Leagues under the sea by Jules Verne

Extended learning opportunities

Students could use these ideas to explore different features of the theme.

Careers

These ideas can be used alongside the lessons in order to discover career pathways associated with key elements of learning from this theme.

Explore careers in Hydrology

[Plumber - Youth Employment UK](#)

[Careers Advice for Young People - Youth Employment UK](#)

Places to visit

This section offers a selection of virtual trips which support knowledge of key areas and attractions from the lessons.

[Virtual escapes: Britain's most peaceful rivers and streams | Countryfile.com](#)

Clubs

WaterAid Charity Fundraisers: [Clean Water, Decent Toilets and Good Hygiene | WaterAid UK](#)



Lessons

Lesson title	Subject	Essential knowledge/concepts	Competencies	National curriculum coverage
Lesson 1: What is water?	Science	<p>Identify the chemical structure of a water molecule.</p> <p>Describe the properties of a water molecule.</p> <p>Examine how water is used around the world to support human life.</p>	<p>SC.CS.01: Using scientific ideas: Develop scientific knowledge and understanding through the specific areas of biology, chemistry, and physics to understand the uses and implications of science, today and for the future.</p>	<p>Science – Chemistry: Students should be taught the particle nature of matter, changes of state in terms of the particle model.</p> <p>Students should be taught the differences between atoms, elements, and compounds.</p>
Lesson 2: Water solutions	Science	<p>Use appropriate scientific terminology – solvent, solute, solution.</p> <p>Describe how temperature and other factors affect the solubility of a substance.</p> <p>Explain what a saturated solution is using the particle model.</p>	<p>SC.ES.01: Planning scientific enquiries: Develop understanding of the nature, processes, and methods of science through different types of science enquiries that help you to answer scientific questions about the world around you.</p> <p>SC.PE.01: Presenting data: Develop data analysis and statistics skills through presenting and interpreting observations to make and evaluate reasoned conclusions that may lead to further investigation.</p>	<p>Science: Working scientifically: Experimental skills and investigations. Students should be taught to make predictions using scientific knowledge and understanding.</p> <p>Chemistry: Pure and impure substances.</p> <p>Physics: Matter: Physical changes.</p>
Lesson 3: Rivers	Geography	<p>Identify the key features of a river.</p> <p>Identify cause and effect relationships relating to physical geography (rivers).</p>	<p>SE.GE.03: Demonstrate understanding of physical geography concepts and their interrelationships with places, environments and processes.</p>	<p>KS3 Geography: Understand how geographical processes interact to create distinctive human and physical landscapes that change over time. Human and physical geography: Physical geography relating to geographical timescales and hydrology.</p>

		Describe the journey of a river.		
Lesson 4: Glacial environments	Geography	Describe the formation of a glacier. Explain how glaciers cause erosion. Examine how glaciers shape the landscape.	SE.GE.03 Demonstrate understanding of physical geography concepts and their interrelationships with places, environments, and processes.	KS3 Geography: The processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.
Lesson 5: Flooding – Storm Dennis	Geography	Identify the causes of flooding. Analyse the aftermaths of floods on local communities. Evaluate flood prevention methods.	SE.GE.03 Demonstrate understanding of physical geography concepts and their interrelationships with places, environments and processes.	KS3 Geography: Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.
Lesson 6: Holy water and Baptism	R.E.	Describe how baptism is celebrated. Explain the symbolism of baptism.	SE.RE.03: Make connections between religious beliefs and practices (learning about religion).	RE SACRE: B3 Consider and evaluate the question: what is religion? Analyse the nature of religion using the main disciplines by which religion is studied.
Lesson 7: Big Read: Blessing by Imtiaz Dharker	English	Identify and describe the key poetic devices present in Imtiaz Dharker’s poem, <i>Blessing</i> . Explain the importance of water for the community of Dharavi. Use the poetic devices identified to compose a piece of poetry.	RL.ID.03: Identify and interpret language devices, sentence forms, including determining technical, connotative, and figurative meanings and analyse how they affect meaning or tone.	KS3 English: Develop an appreciation and a love of reading, read increasingly challenging material independently through contemporary poetry. Read critically through knowing how language, including figurative language, vocabulary choice, grammar, text structure and organisational features, presents meaning.

<p>Lesson 8: Big Write: WaterAid charity adverts</p>	<p>English</p>	<p>Discover the features of 'charity adverts'. Explore adventurous and appropriate vocabulary. Employ persuasive techniques.</p>	<p>CL.WP.05: Select effective vocabulary appropriate to task and purpose (Word Choice). TL.IT.01: Presenting information using ICT (Word, PowerPoint, websites, media).</p>	<p>KS3 English: Acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language.</p>
<p>Lesson 9: Water pollution</p>	<p>Science</p>	<p>Describe water pollution. Identify the causes of water pollution. Examine the effects of water pollution on human and animal life.</p>	<p>SE.GE.02: Human Geography Demonstrate understanding of human geography concepts and their interrelationships with places, environments, and processes. SC.SL.03: Develop and adapt speaking skills and strategies in formal and informal contexts (speeches and presentations).</p>	<p>KS3 Geography: Human and physical geography: understand how human and physical processes interact to influence and change landscapes, environments, and the climate.</p>
<p>Lesson 10: Coral reefs</p>	<p>Geography</p>	<p>Describe what coral reefs are and their importance for the environment. Investigate food chains that exist and the interdependence of living organisms. Discuss and investigate the environmental problems facing coral reefs and the wider implications.</p>	<p>SE.GE.03: Demonstrate understanding of physical geography concepts and their interrelationships with places, environments, and processes.</p>	<p>KS3 Geography: Understand how geographical processes interact to create distinctive human and physical landscapes that change over time. Human and physical geography: Physical geography relating to geographical timescales and hydrology.</p>