



HITCHHIKING WITH H₂O

KC Water offers water quality education to students of all ages. All lessons can be modified for various grade-levels to meet science standards and are free of charge to schools, residents, and businesses in Kansas City. Schedule a lesson at water.education@kcmo.org.




OVERVIEW: Students are introduced to characteristics of water and categories of water pollution. They learn how weathering, erosion, and deposition impact water quality and how various substances interact with our waterways. Finally, they learn how point and non-point source pollution affect water quality.

TOTAL CLASS TIME: Approximately 1 hour

KEY COMPONENTS: Introduction includes the characteristics of water and water properties. Main story covers weathering, erosion and deposition, and various pollutants in water. Conclusion engages students in discussion and debate regarding point and non-point pollution. In addition to NGSS/MLS, this lesson also relates to standards for Language Arts.

KEY VOCABULARY: Contract, expand, weathering, solvent, solute, solution, dissolved, turbid, suspended particles, erosion, disperse, point source pollution, non-point pollution



Water  Quality
EDUCATION

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NEXT GENERATION SCIENCE STANDARDS / MISSOURI LEARNING STANDARDS

<u>PHYSICAL SCIENCE</u>		Grade 3	Grade 4	Grade 5
PS1 - Matter and Its Interactions	A - Structure and Properties of Matter	3.PS1.A.1		5.PS1.A.1 5.PS1.A.2
	B - Types of Interactions of Matter			5.PS1.B.2
PS2 - Motion and Stability: Forces and Interactions	A- Forces and Motion	3-PS2-2	4.PS2.A.1 4.PS2.A.2	5-PS1-3
	B-Types of Interaction			5.PS2.B.1
PS3 - Energy	C- Relationship Between Energy and Forces		4.PS2.B.2 4.PS3.C.1	

<u>EARTH and SPACE SCIENCE</u>		Grade 3	Grade 4	Grade 5
ESS2 - Earth's Systems	A- Earth Materials and Systems		4.ESS2.A.1	5.ESS2.A.1
	C- The Role of Water in Earth's Surface Processes			5.ESS2.C.1
ESS3 - Earth and Human Activity	A- Natural Resources		4.ESS3.A.1	
	B- Natural Hazards	3.ESS3.B.1		
	C- Human Impacts on Earth's Systems			5.ESS3.C.1

<u>ENGINEERING TECHNOLOGY and the APPLICATION OF SCIENCE</u>		Grade 3	Grade 4	Grade 5
ETS1 - Engineering Design	B- Developing Possible Solutions	3.ETS1.B.1	4.ETS1.B.1	5.ETS1.B.1
	C- Optimizing the Solution Process	3.ETS1.C.1	4.ETS1.C.1	5.ETS1.C.1