



# FORCE OF WATER

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](mailto:water.education@kcmo.org).

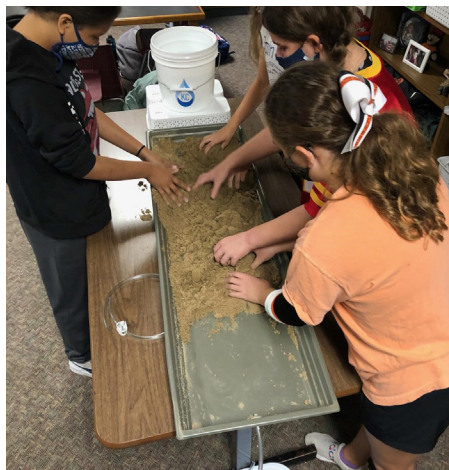


**OVERVIEW:** Students will learn about watersheds and how water carries matter through a watershed. The lesson focuses on stormwater runoff and contaminants carried to our waterways. Students will model a watershed and learn about solutions to flooding as well as possible methods of pollution control.

**TOTAL CLASS TIME:** Approximately 1 hour

**KEY COMPONENTS:** Introduction includes watersheds and the movement of water, groundwater, and stormwater runoff. Hands-on portion will have students using stream tables to model a watershed and how water moves through it. Students will also model how water can move matter within the watershed. Conclusion teaches possible solutions to problems and has students reflect upon what changes they can make. In addition to NGSS/MLS, this lesson also relates to standards for Language Arts, Mathematics, and Social Studies.

**KEY VOCABULARY:** Watershed, confluence, erosion, deposition, stormwater, runoff, impervious and pervious surfaces



Water Quality  
EDUCATION

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## NEXT GENERATION SCIENCE STANDARDS / MISSOURI LEARNING STANDARDS

<b>PHYSICAL SCIENCE</b>		<b>Grade 4</b>	<b>Grade 5</b>	<b>Grade 6-8</b>
PS2-Motion & Stability: Forces & Interactions	A- Forces and Motion			6-8.PS2.A.1
	B-Types of Interaction		5.PS2.B.1	
		4.PS2.B.2		

<b>EARTH and SPACE SCIENCE</b>		<b>Grade 4</b>	<b>Grade 5</b>	<b>Grade 6-8</b>
ESS2 - Earth's Systems	A- Earth Materials and Systems	4.ESS2.A.1	5.ESS2.A.1	6-8.ESS2.A.2
	C- The Role of Water in Earth's Surface Processes			6-8.ESS2.C.1
	A- Natural Resources	4.ESS3.A.1		
ESS3 - Earth and Human Activity	B- Natural Hazards			6-8.ESS3.B.1
	C- Human Impacts on Earth's Systems		5.ESS3.C.1	
				6-8.ESS3.C.2

<b>ENGINEERING TECHNOLOGY and the APPLICATION OF SCIENCE</b>		<b>Grade 4</b>	<b>Grade 5</b>	<b>Grade 6-8</b>
ETS1 - Engineering Design	A- Defining and Delimiting Engineering Problems	4.ETS1.A.1	5.ETS1.A.1	
		4.ETS1.B.1	5.ETS1.B.1	6-8.ETS1.B.1
	B- Developing Possible Solutions			6-8.ETS1.B.2