

3rd-12th Grade

Water Discovery Field Trip Program

Objective

To demonstrate how water pollution can result from a variety of activities and sources in our own backyards and neighborhoods, and how pollution can impact our water resources.

Overview

Students will observe a three-dimensional model of a watershed. Students will learn about the Santa Ana Watershed, pollution (point and non-point), effects of pollution, and groundwater contamination. Students will “pollute” the watershed by placing “pollutants” (i.e. Kool-Aid, sprinkles and cocoa powder) on the model and will then simulate rainfall (spray bottle). Students will observe the effects of the “pollutants” on the community and water supply.

Length of Time

30-40 minutes

Next Generation Science Standards* Connections

3rd Grade	3-ESS2 Earth's Systems 3-ESS3 Earth and Human Activity
4th Grade	4-ESS2 Earth's Systems 4-ESS3 Earth and Human Activity
5th Grade	5-ESS2 Earth's Systems 5-ESS3 Earth and Human Activity
Middle School	MS-LS2 Ecosystems: Interactions, Energy, Dynamics MS-ESS2 Earth's Systems MS-ESS3 Earth and Human Activity MS-ETS1 Engineering Design
High School	HS-LS2 Ecosystems: Interactions, Energy, Dynamics HS-ESS2 Earth's Systems HS-ESS3 Earth and Human Activity



Common Core State Standards Connections

3rd Grade	<i>ELA/Literacy</i>	RI.3.1, RI.3.9, W.3.1, W.3.7, W.3.8
	<i>Mathematics</i>	MP.2, MP.4, MP.5, 3.MD.A.2, 3.MD.B.3
4th Grade	<i>ELA/Literacy</i>	RI.4.1, RI.4.7, RI.4.9, W.4.7, W.4.8, W.4.9
	<i>Mathematics</i>	MP.2, MP.4, MP.5, 4.MD.A.1, 4.MD.A.2, 4.OA.A.1
5th Grade	<i>ELA/Literacy</i>	RI.5.1, RI.5.7, RI.5.9, W.5.8, W.5.9, SL.5.5
	<i>Mathematics</i>	MP.2, MP.4, 5.G.A.2
Middle School	<i>ELA/Literacy</i>	RST.6-8.1, RST.6-8.7, RST.6-8.8, RST.6-8.9, RI.8.8, WHST.6-8.1, WHST.6-8.2, WHST.6-8.7, WHST.6-8.8, WHST.6-8.9, SL.8.1, SL.8.4, SL.8.5
	<i>Mathematics</i>	MP.2, MP.4, 6.RP.A.1, 6.RP.A.2, 6.RP.A.3, 6.EE.C.9, 6.SP.B.5, 6.NS.C.5, 6.EE.B.6, 7.EE.B.4, 7.EE.3, 7.SP
High School	<i>ELA/Literacy</i>	RST.9-10.8, RST.11-12.1, RST.11-12.2, RST.11-12.7, RST.11-12.8, WHST.9-12.1, WHST.9-12.2, WHST.9-12.5, WHST.9-12.7, SL-11-12.5
	<i>Mathematics</i>	MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSS-ID.A.1, HSS-IC.A.1, HSS-IC.B.6

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