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Natural Filtration



STANDARDS & CONNECTIONS:

NGSS.MS-LS2-5, NGSS.MS-ETSI, NGSS. HS-ETSI-2

BACKGROUND:

How can dirt clean water? “Nature works to filter and release water over time – for free! In this way, nature reduces the amount of artificial treatment needed to filter water and also contributes to prevention of flooding. In nature, water is filtered through layers of soil, sand, rock, and other natural materials like leaves.”ⁱ In this puzzler, students explore how natural materials filter runoff and improve water quality.

SUGGESTED MATERIALS:

2 two-liter bottles, coffee filters, soil, rocks, sand, dirty water, pH strips

QUESTION:

How can we filter water naturally?



CREATE	TEST & IMPROVE	SHARE
<p>Students will create a natural filtration system and investigate how things found in nature (sand, rocks, soil, and plants) act to improve our water quality.</p>	<p>Students will test their filtration system and identify which one produces cleaner water.</p>	<p>Students will share their findings with their classmates and at home.</p>



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 Investigate how to create more natural filtration systems and what your local community has already done.

ⁱ https://www.natureworkseverywhere.org/asset/resources/HowNaturalAreasFilterWater_v4_8_31_2015.pdf

https://www.canr.msu.edu/news/want_clean_water_filter_with_soil

<https://www.jpl.nasa.gov/edu/teach/activity/water-filtration-challenge/>

