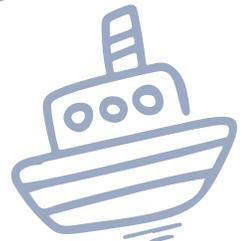
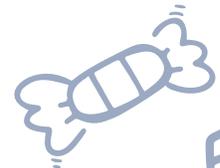


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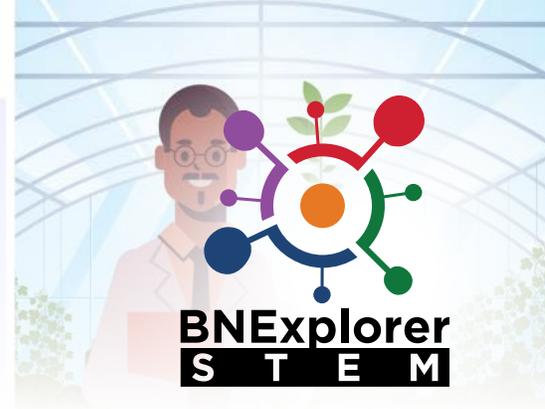


Mission Erosion



K-2





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SPARK



First: What do you know about erosion? Next, please watch this video over erosion.

This picture is an example of erosion. It can be found on the following website:

<https://www.youtube.com/watch?v=qNTOq1uEObc>

<https://www.wndu.com/content/news/Severe-beach-erosion-wiping-away-roads-beaches-in-Berrien-County-566952111.html>

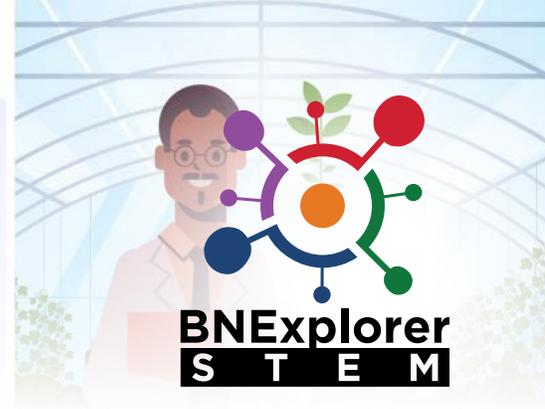
IMAGINE

Before doing the experiment, discuss with family or friends about what you think will happen to the candy. It is encouraged to sketch out the design of your experiment before actually doing it. You can use the image of the jars provided to draw your design. While doing the experiment take notes about what is happening in both jars on your design page in the space provided.

CHALLENGE

This website (<https://sugarspiceandglitter.com/easy-erosion-experiment/>) has an example of an experiment that can be used to determine if more erosion occurs with moving water or with still water. The purpose of this experiment is to decide whether more erosion occurs with moving water or still water.





Materials Needed:



- 2 jars/containers that can be sealed tightly and are clear
- 2 small bowls
- 2 M & M's
- 2 pieces of soft candy (examples: gummy worms, gumdrops)
- 2 pieces of hard candy (jolly ranchers, candy cane)
- 2 cups of cold water

(you may want to lay something out on a table that can be thrown away to make cleaning up easier)

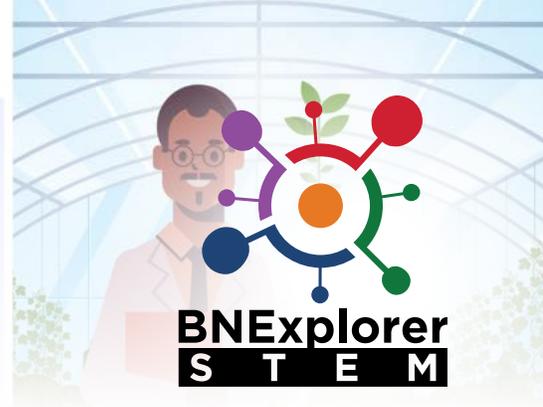
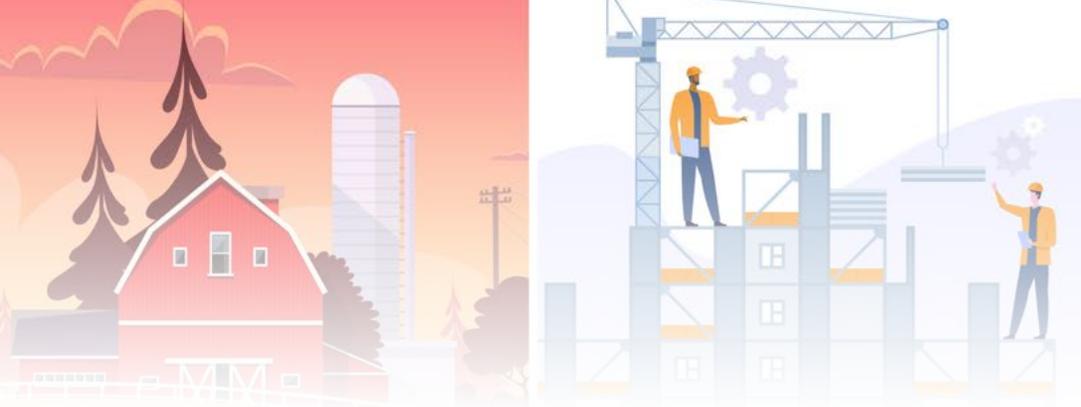
What to do:

1. In each jar add one cup of water.
2. Place one M&M, one piece of soft candy, and one piece of hard candy in each jar (each jar now has 3 pieces of candy).
3. Place the lid on one of the jars so that the lid is on, but not tight.
4. In the second jar you will add the lid so that it is tight, and shake this jar for 2-3 minutes.
5. After shaking the jar, you will take out the candy in both jars and compare them to each other. Whichever jar the candy is more dissolved/disformed in the more erosion occurred.
6. Talk with family and/or friends if your guess was correct or incorrect.

After completing the experiment you can share your findings and creations on **#BNSTEMExplorer**.

CHALLENGE QUESTION

Does more erosion occur if the water is moving or if the water is still?



EXPLORE

There are at least two places in Bloomington/Normal where streambanks were made to help prevent erosion. The first one is in Fairview Park, and the second one is in Anderson Park. Grab a parent and go visit these streambanks that help prevent erosion!



CAREERS

An interview with Julie Weger - Storm Water Engineering Technician with the Town of Normal. Julie assesses all of the construction sites for runoff. She originally went to school to be a chemist, but decided she liked working outside so she changed to civil engineering. If you like numbers and working outside, this may be a career for you!



FUN FACT

“An estimated 106,800 tons of erosion occurs on an annual basis from the six major types of soil erosion within the Lake Bloomington watershed.”

This fact was found on the following website:
<http://www.fishhabitat.org/waters-to-watch/detail/lake-bloomington-illinois>

IDENTIFY

Erosion mainly affects farmers if they don't take the necessary steps to try and prevent it in their fields. If they don't prevent erosion it can ruin the crops or the land the crops are grown on. This would then affect how much profit they make because they won't have as many crops to sell.

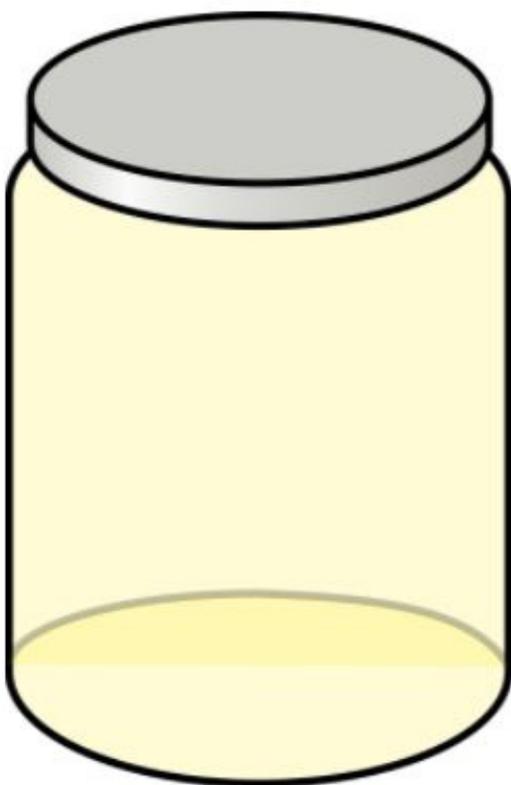
Watch this video to learn more about how we can help conserve soil. <https://youtu.be/5-6lwAk5T40>





EXPERIMENT NOTES

Use this outline to draw the design of your experiment. What should it look like when it is all set up?



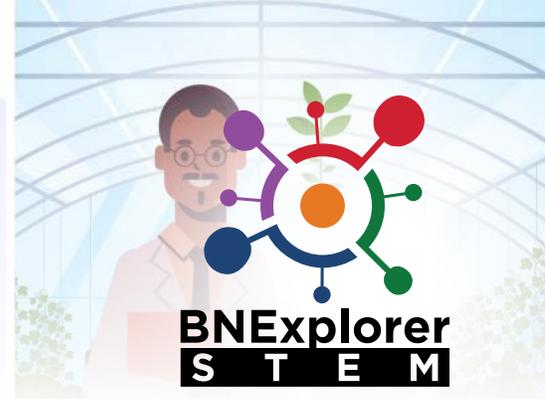
Jar 1



Jar2

Experiment notes:

While you are completing the experiment, be thinking like a scientist and write down what you see. What is happening to the candy in each jar? Which jar is dissolving the candy faster? Write down anything about the experiment here.

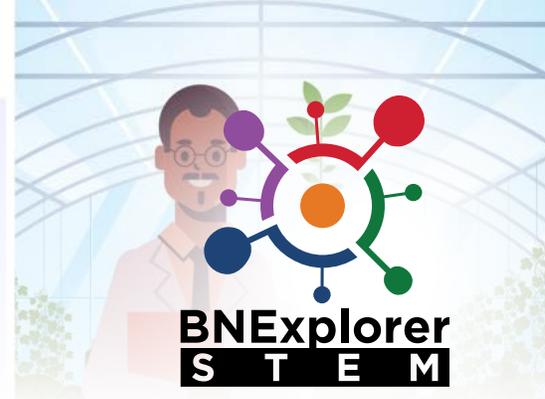
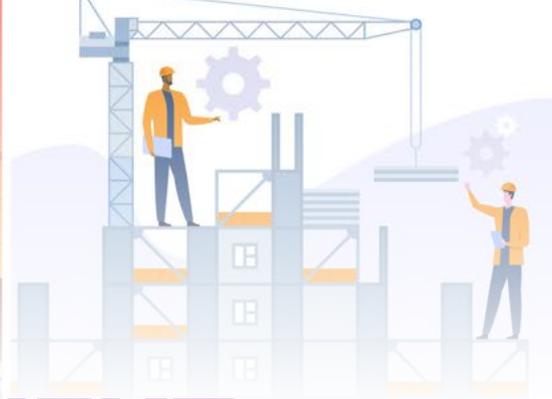


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EXPERIMENT NOTES

What do you see?	What is happening to the candy in each jar?	Which jar is dissolving candy faster?





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EXPERIMENT NOTES

