

Community Water Pollution Activity



Overview:

This lesson aims to help 5th-grade students understand the concept of watersheds and the impact of water pollution. Students will create a visual representation of a town, including geographical features such as mountains, rivers, and town buildings. After creating the watershed, students will conduct an experiment to understand where water travels through a watershed after a rainstorm. This lesson will highlight how water brings pollution from roads, construction zones, farms and residential areas into our lakes, streams, and oceans.

Activity Duration: 1 hour

ESSENTIAL QUESTIONS

- *What is a watershed?*
- *What types of pollution impact a watershed?*
- *How can we reduce water pollution?*

MATERIALS NEEDED

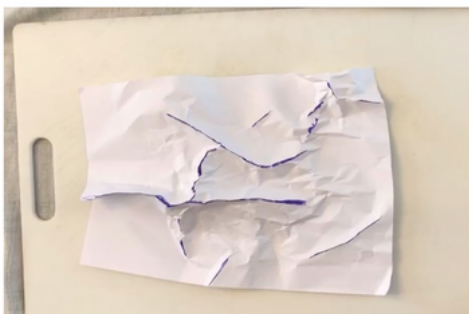
- *White sheets of paper (one per student)*
- *Markers*
- *Water cups or spray bottles*
- *Plastic tablecloths or newspaper to protect workspaces*
- *Optional: Reference materials about watersheds, pollution and impacts*



STEPS



Crumple up a sheet of white paper with both hands, and then lay out and semi-flatten.

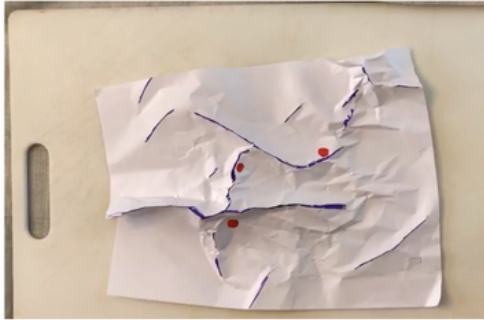


*Color the ridges (tops of the peaks) with a **purple** marker.*

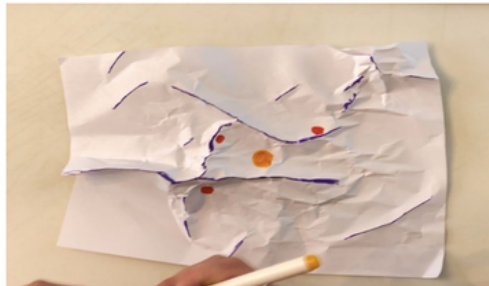
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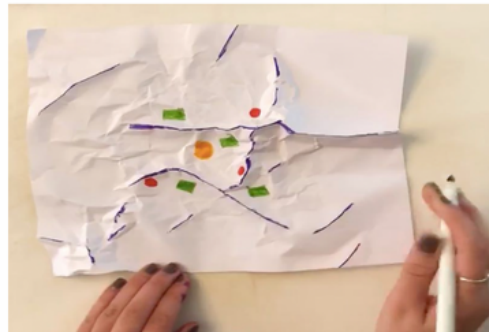
STEPS



*Draw three small towns represented as **red** dots.*



*Draw one city in a valley, represented as a **yellow** dot.*



*Draw four farms, represented as **green** squares.*



*Draw a coal mine, represented as a **black** triangle.*



Community Water Pollution Activity (Student page)

Write your hypothesis:

Soon, you are going to take your spray bottle or pipet and create rainfall over your watershed. Before you do this, you must make a hypothesis as to what will happen when you conduct this experiment?

Where will the precipitation end up after the storm ends?



What will happen to the pollution in the watershed as it rains?

Create a rainstorm over your watershed!

Take your spray bottle and start to spray water on all areas of your watershed. Carefully observe the changes that occur. Be creative! You can make certain areas heavy rainfall areas and others lighter areas to observe the differences.

Record your observations - was your hypothesis correct or incorrect?

What are three things we can do to reduce water pollution in our communities?
