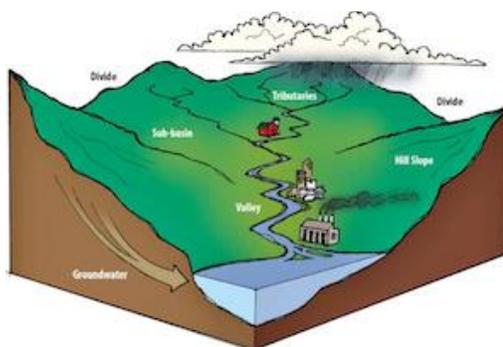


Activity: Desktop Watershed Teacher Instruction Sheet

Background

In this activity, students model a watershed and how pollution may affect it. A watershed (also known as a drainage basin) is the area of land where water from precipitation and runoff converge to a single point where it may exit the basin into the ocean or a closed lake (such as the Great Salt Lake). Watersheds are separated from one another by topographic features such as mountains. Key terms include precipitation, runoff, rivers, streams, ridge, and watershed.



[Heathcote, 1998](#)

Materials

- Piece of 8.5x11 inch plain white paper
- Spray bottle
- Water-based markers (blue and red)

Procedure

1. Warn students at the beginning of the activity to clear off their desks since it may get a little wet.
2. *Loosely* crumple the sheet of paper.
3. Smooth the paper but leave it a bit crumpled.
4. Have students imagine that the paper is a hilly or mountainous region of the surface of the Earth.
5. Have students identify “mountains” and “valleys” in their model.
6. Students should trace a line along the tops of mountains and ridges with a the blue marker.
7. Students should identify a location on the model where they would like to place a source of pollution and mark the location with a large red dot.
8. Model precipitation by spraying their landscape (mist setting) and observe what happens.

FOLLOW-UP QUESTIONS

1. Does you model of the Earth’s surface look like a mountain range?
2. How did the water travel over the landscape and where did it collect?
(flows down streams on mountains and collects in valleys to form lakes)
3. Can you identify more than one watershed in your model?
4. What happened to the site with pollution (red dot)? Did the pollution move in the landscape?
(pollution should have moved downhill)
5. Where did the pollution collect?
(red ink should pool in a valley that forms a lake)
6. What happened to the water quality in the lake?