



Build a model to see how water and pollution travel across land to a river.

Name _____ Date _____

Materials

a sheet of paper, shallow box lid or tray, water-based markers (brown, green, black), spray bottle with water

Procedure

1. Crumple the paper, then open it partway so it has ridges and valleys. Set it in the tray.
2. Trace the ridge tops with a blue marker. These are your watershed divides.
3. Mark pollution sources: brown dots for soil, green for fertilizer, black for oil from cars.
4. Predict where the water will go. Draw arrows on the map to the right.
5. Spray "rain" over the model 10 to 15 times. Watch where the colors move.

Prediction map (top view of your model)

1. Where did the water collect? Why there?

2. Which pollution source spread the farthest? Explain.

3. A watershed divide is a ridge that separates water flowing to different places. How did your model show this?

4. The Water Division takes water from the Missouri and Mississippi Rivers. How can what happens upstream affect the water St. Louis treats?



Watershed Words and Secret Code

Write the letter of the matching definition next to each term. Then copy the letters into the code boxes in order.

Name _____ Date _____

- | | |
|-----------------------------|--|
| 1. _____ watershed | E Water stored underground in soil and rock |
| 2. _____ divide | D All the land that drains into the same river, lake, or stream |
| 3. _____ tributary | T Where a river empties into a larger body of water |
| 4. _____ confluence | A Pavement or roofs that water cannot soak into |
| 5. _____ headwaters | W A smaller stream that flows into a larger river |
| 6. _____ mouth | N The place where two rivers join |
| 7. _____ runoff | M Flat land next to a river that floods when the river rises |
| 8. _____ groundwater | R Water that flows over the land surface into streams |
| 9. _____ impervious surface | S The source or beginning of a river |
| 10. _____ floodplain | O High ground that separates one watershed from another |

Secret code: which way does water always flow in a river?

1	2	3	4	5	6	7	8	9	10

Bonus: St. Louis sits near the confluence of which two rivers? Why is that a good place for a city to get its water?



Name _____ Date _____

Brainstorm three ideas

Chosen idea and why. How will you test it with your model?



For teachers

Grade 6 Answer Key

Accept reasonable answers that are supported by evidence.

Watershed Words and Secret Code

1. watershed = D, 2. divide = O, 3. tributary = W, 4. confluence = N, 5. headwaters = S, 6. mouth = T, 7. runoff = R, 8. groundwater = E, 9. impervious surface = A, 10. floodplain = M

Code: DOWNSTREAM. **Bonus:** the Mississippi and Missouri Rivers.