



## Exploring Your Watershed: Wax Paper Simulation

*These materials are part of EPA Report #EPA/600/R-18/203.*

Student Name(s): \_\_\_\_\_

1. Your crinkled-up piece of paper represents the landscape. The peaks are sometimes called “ridges” or “divides.” Does your landscape have ridges or is it flat? How is this like where you live? Be as specific as possible. \_\_\_\_\_  
\_\_\_\_\_
2. Make a prediction: What do you think will happen to your landscape when you spray the water? Use the words “precipitation” AND “ridge” or “divide” in your answer.  
\_\_\_\_\_  
\_\_\_\_\_
3. Look back at your answer to question #2. Was your prediction correct? Explain why or why not and what happened. \_\_\_\_\_  
\_\_\_\_\_
4. You colored some of the ridges different colors. How did the rain make the different colors travel? \_\_\_\_\_  
\_\_\_\_\_
5. How might **pollution** in one part of a watershed impact the water supply? In your answer, give at least one example of a type of pollution that could impact the watershed or animal habitats within the watershed. \_\_\_\_\_  
\_\_\_\_\_
6. Where did all of the water collect in your landscape? \_\_\_\_\_ This collection of water in a real landscape could be a **pond** or a **lake**. You might have more than one lake or pond in your landscape. This means that you have **multiple watersheds!** Count the total # of watersheds in your landscape. Write that # here: \_\_\_\_\_. When your teacher comes by, have your teacher check to make sure you counted them all!
7. Is there any water that ran off the side of your wax paper into the tub? In an actual landscape, what would that water flow into? \_\_\_\_\_
8. In real life, the lines that travel from near the tops of the ridges down into ponds and lakes are called **streams**. Point out the **stream(s)** in your wax paper landscape when your teacher comes by. Count the number of stream(s). Write that # here: \_\_\_\_\_
9. When water travels over the land, this is called **runoff**. What happens to runoff after lots of rain? \_\_\_\_\_  
\_\_\_\_\_



## Exploring Your Watershed: Wax Paper Simulation

1. Your crinkled-up piece of paper represents the landscape. The peaks are sometimes called “ridges” or “divides.” Does your landscape have ridges or is it flat? How is this like where you live? Be as specific as possible. *(does not have to be exact) the high points are like hills or mountains and the low points are like valleys, where creeks or rivers might be*
2. Make a prediction: What do you think will happen to your landscape when you spray the water? Use the words “precipitation” AND “ridge” or “divide” in your answer. *(does not have to be exact) When we spray the water, or when we make the precipitation fall on the landscape, the water will hit the ridge or divide and run down either side of the slope. It might pool up in the low areas or in the bottom.*
3. Look back at your answer to question #2. Was your prediction correct? Explain why or why not and what happened. *Answers will vary.*
4. You colored some of the ridges different colors. How did the rain make the different colors travel? *Answers will vary; some students may have found that their colors mixed together in a pool, showing that different slopes can be in the same watershed.*
5. How might **pollution** in one part of a watershed impact the water supply? In your answer, give at least one example of a type of pollution that could impact the watershed or animal habitats within the watershed. *Answers will vary.*
6. Where did all of the water collect in your landscape? *In the bottom or the lowest point.* This collection of water in a real landscape could be a **pond** or a **lake**. You might have more than one lake or pond in your landscape. This means that you have **multiple watersheds!** Count the total # of watersheds in your landscape. Write that # here: *will vary.* When your teacher comes by, have them check to make sure you counted them all!
7. Is there any water that ran off the side of your wax paper into the tub? In an actual landscape, what would that water flow into? *Answers will vary; examples include the continuation of the same stream or river, a wetland, the sea.*
8. In real life, the lines that travel from near the tops of the ridges down into ponds and lakes are called **streams**. Point out the **stream(s)** in your wax paper landscape when your teacher comes by. Count the number of stream(s). Write that # here: *will vary*
9. When water travels over the land, this is called **runoff**. What happens to runoff after lots of rain? *Examples: more water could cause erosion on the slopes, potential flooding of ponds or lakes, etc.*