**Riparian Zone Data Worksheet**

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| **Type** | **Distance (m)** | **Time (s)** | **Initial Volume****(mL)** | **Final Volume (mL)** | **Water Velocity (m/s)** | **Observations** |
| Pavement |  |  | 500mL |  |  |  |
| Gravel |  |  | 500mL |  |  |  |
| Gravel + Dry Soil |  |  | 500mL |  |  |  |
| Gravel + Wet Soil |  |  | 500mL |  |  |  |
| Gravel + Wet Soil + Leaves |  |  | 500mL |  |  |  |

*Answer the following questions, referring to back to the data chart. Answer each question completely. If you need more space, you may use another piece of paper.*

1. In which scenario did the water move the quickest? Which scenario did the water move the slowest? Why do you think this happened?
2. What scenarios (if any) did a significant (more than 1mL) difference between the initial volume and final volume occur? Why do you think this happened?
3. Did the water ever look different after moving through the riparian corridor? What scenarios (if any) did this occur. Why do you think this happened?
4. Think about a river, which of these corridors might help slow the flooding of a river? Why do you think this?
5. In the final trial, we use leaves to demonstrate vegetation. What about this test is not accurate? (i.e. what do plants have that was not represented in the bottle?) How would this difference possibly affect the water flow?