

## Soil Testing Data

### *Part 1 Soil as a filter*

Dye	Filter Material	Color of Filtrate	Volume of Filtrate
Methylene Blue	Soil		
	Sand		
Eosin Y	Soil		
	Sand		

1. Did the sand samples and/or the soil samples absorb water? Which absorbed the most water?
2. Compare the result of the dyes after filtering through the soil samples. Which dye was readily absorbed by the soil sample?
3. Why was one dye retained by the soil while the other moved through the soil unaffected?
4. What purpose did the sand serve in this demonstration?

### *Part 2 – Soil Testing*

Sample	Infiltration Rate Unit?	Water Holding Capacity	pH	Nitrogen	Phosphorous	Soil Composition by Layers	Soil Type
Sand						% sand: <u>100%</u> % silt: <u>0%</u> % clay: <u>0%</u>	
Your soil sample from:						% sand: _____ % silt: _____ % clay: _____	

1. Describe the characteristics of your soil you chose.
2. How do these characteristics relate to the location?
3. Describe the best type of soil for each of the following, and explain why that soil is ideal for that use:
  - a) Wheat Farming
  - b) Lining a land fill
  - c) Lining a ground recharge basin
  - d) Under a school building
4. How does acid precipitation affect soil fertility?

