Pre-lab questions

1. Grab a sample of each soil type. Pick up a small handful and feel the texture of the soil type. Below, list 2 physical properties of each soil type.

Physical properties include:

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| --- | --- | --- |
| Soil Type | Characteristic 1 | Characteristic 2 |
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1. For each type of soil, make a prediction of how well each holds water. Below, record your predictions on the spectrum

Holds least amount Holds most
of water water

Using the flow chart provided on the next page, classify each soil type you found.

Place your answers in the table below. **You might not use all the space provided. That’s OK.**

|  |  |  |
| --- | --- | --- |
| **Soil Types** | **Classification (clay, sand, etc.)** | **Which feature made the classification obvious?** |
| Example: Type 1 | Silty Clay Loam | Soil formed a ballSoil formed a ribbonSoil makes 1-2” ribbon before it breaksSoil feels very smooth |
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**SOIL TESTING**

In order to test your soil for phosphorus, potash, and nitrogen, you must first complete the following steps: (**pH test can be done with multimeter**)

* Fill a beaker with a 1:5 ratio of soil to water. Example: 100mL soil to 500mL of water.
* Stir the soil and water together well, for at least a minute until it is well mixed.
* Take your sample and place it on a back table **MAKE SURE IT IS LABELED FOR SOIL TYPE AND NAMES OF GROUP MEMBERS**
* Let the soil settle out overnight
* After your soil has settled out, grab a soil testing kit and the appropriate, colour corresponding capsule.
* Make sure the testing kit is clean
* Fill the test and reference chambers to the “fill” mark on the chart with the solution from your soil sample. **TRANSFER ONLY LIQUID, NOT SOIL**
* Holding the capsule over the test chamber, open the correct colour capsule and pour powder into test chamber.
* Place cap on and make sure it is sealed. Shake thoroughly
* Soil Texture