**Making Soil Lab**

**Purpose**: To make a soil from component pieces and observe how well it allows plant growth compared to a sample found in nature.

**Procedure**:

1. Plan how much sand, silt, clay, and organic matter you want to include into your soil.

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| --- | --- | --- | --- | --- |
|  | **Sand** | **Silt** | **Clay** | **Organic Matter** |
| **Number of Scoops** OR **Relative Percentage** |  |  |  |  |

1. Collect a mixing container and scoop your separate components into the container.
2. Mix your soil thoroughly by hand. This may require some effort and some time. The more you mix, the higher the air content that will be possible in your soil.
3. If you choose to make a modification to your original formula, make note of any changes

**Actual Soil Formula**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Sand** | **Silt** | **Clay** | **Organic Matter** |
| **Number of Scoops** |  |  |  |  |

1. Collect two cups, poke drainage holes in the bottom of the cups.
2. Label one cup “Hand-made” label the other “Sample from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” include where you found your sample soil.
3. Fill your respective cups with soil from the appropriate source.
4. Use the Hand-Texturing Activity Sheet to identify which type of soil each type is.

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| --- | --- | --- |
| **Hand Made Soil Type** |  | **Sample from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Soil Type** |
|  |  |  |

1. Plant a bean seed in each cup, about 1 cm deep and water the soil.
2. Water and observe the growing plants over the next couple weeks.

**Observations**

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| **Date** | **Hand Made Soil** | **Sample from \_\_\_\_\_\_\_\_\_\_\_\_\_** |
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