

## Soil Composition Worksheet

### *Part 1: Description of soil samples*

Answer the following questions for each sample.






- What color is the soil? Is it light or dark? Why do you think it is this color?
- Does the soil seem sandy? Is the soil very solid or soft?
- Are there pieces in the soil? What are the pieces made up of?
- If you put water in the soil, do you think it would absorb the water, or would it flow through the soil easily?

Sample 1:

Sample 2:

Sample 3:

Part 2: Match soil samples to plants

<p><b>Bell Pepper</b></p> <p>Keep well-watered and in well-drained soil.</p>  <p><b>Soil Sample #:</b></p>	<p><b>Christmas Cactus</b></p> <p>Allow soil to dry between waterings and use well-drained soil.</p>  <p><b>Soil Sample #:</b></p>	<p><b>Rubber Tree</b></p> <p>Keep soil evenly moist but not soggy.</p>  <p><b>Soil Sample #:</b></p>
<p><b>Succulents</b></p> <p>Allow soil to dry between waterings and use well-drained soil.</p>  <p><b>Soil Sample #:</b></p>	<p><b>Hibiscus</b></p> <p>Keep soil evenly moist but not soggy.</p>  <p><b>Soil Sample #:</b></p>	<p><b>Cherry Tomato</b></p> <p>Keep well-watered and in well-drained soil.</p>  <p><b>Soil Sample #:</b></p>

Give your reasoning for matching each plant with a soil sample.

*Part 3: Calculate the soil composition*

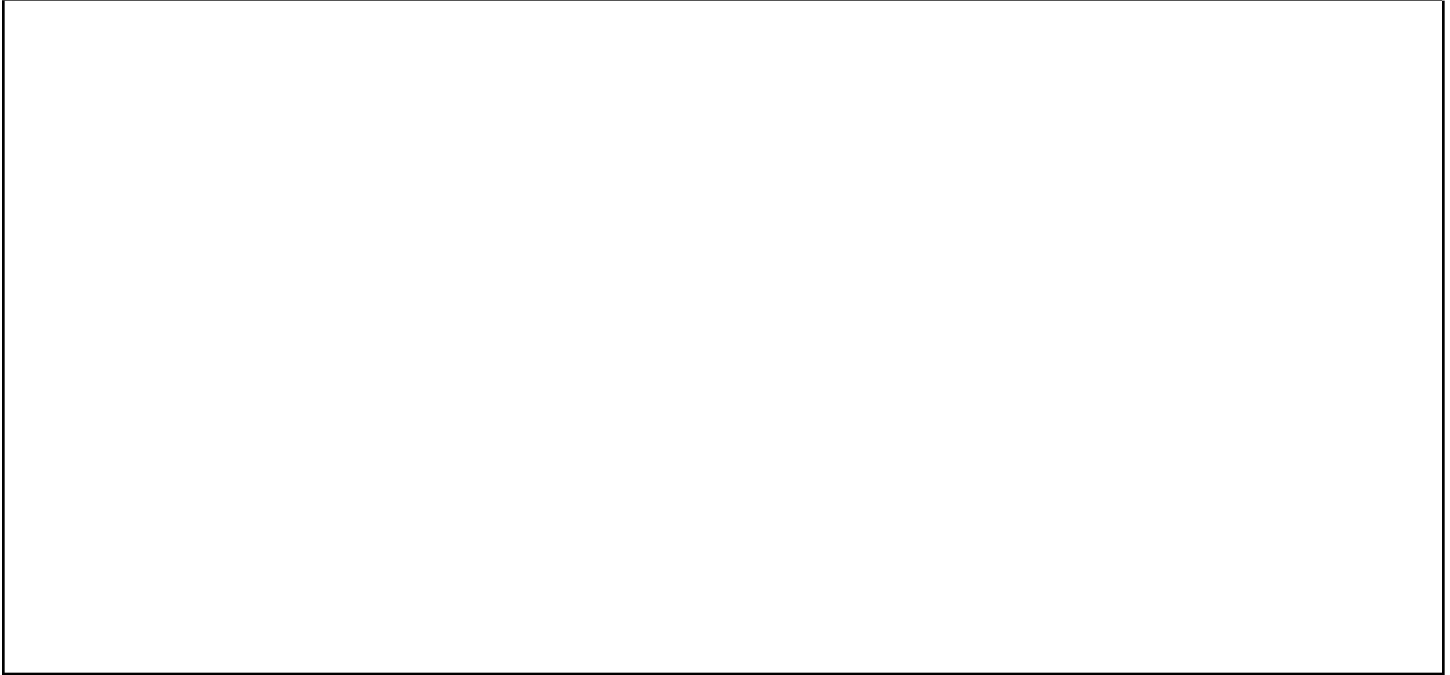
Soil sample to analyze:

Percentage of each component:

Total mass (grams) of soil sample:

Calculated mass of each component:

Look at what soil sample you thought would be best for each plant. Now that you know the exact composition of each soil, do you still think your predictions are accurate? How does this additional evidence support or weaken your claim?



*Part 4: Cereal soil composition*

Record the number of each type of cereal in your sample:

Calculated percentage for each type of cereal:

What soil sample is represented by the cereal model? What is your reasoning?

What soil component does each cereal type represent? How do you know?

*Part 5: Design your own cereal soil*

Select one of the other soil samples. Write the 100-piece cereal model recipe for that soil.