Name: _____   **Date:** _____

Messin' With Mixtures Activity – Soil Sleuths Worksheet

1. Look at the items in Bag A. What do you see?

   _____

   _____

2. If peanuts and raisins are the regular components of soil, how many different types of contaminants are present in your soil sample? _____

3. What is the total mass of your bag? Be sure to subtract the mass of the Ziploc® bag itself. Record this amount in the "Mass of Mixture" column of the chart.

4. Separate the parts of the items and find the mass of each group. Use the following formula to calculate the percentage for each part of the mixture. Record your data in the chart.

   Mass $\div$ Mass of Mixture x 100 = % of Mixture

5. Check your answer by adding up all the numbers in Column 4. The total should be 100 because all the parts of your mixture combine to make up the whole mixture.

1. Item	2. Mass (g)	3. Mass of Mixture (g)	4. % of Mixture
		Total =	

6. What percentage of the soil was contaminated? _____

7. What situations would a contaminated soil sample be of concern to engineers?

   _____

   _____

   _____