Hit the trail! ![C:\Users\jdemaree\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\4V0A02J6\MC900286500[1].wmf]()

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Objective: To observe a mixture and to determine it’s mass.

Materials: Small bag of trail mix, balance

Procedure:

1. Look at the mixture in the bag. What do you see?
2. Would this mixture be classified as a heterogeneous or homogeneous mixture? Give a reason for your answer.
3. What is the total mass of your mixture? Be sure to subtract the mass of the Ziploc bag. (Ziploc bag = \_\_\_\_ g) Record this amount in the “Mass of Mixture” column of the chart.
4. Separate the parts of the mixture and find the mass of each group. Use the formula provided to calculate the percentage for each part of the mixture. Record your data in the chart.

Observations:

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Item | Mass (g) | Mass of Mixture (g) | % of Mixture |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| FORMULA: Mass of substance (g) ÷ Mass of Mixture (g) x 100 TOTAL = |

Conclusion/Analysis:

1. What was your total % equal to 100? Why should it have been?
2. What other products provide information about percentages?
3. What is the difference between a homogenous and a heterogeneous mixture? Give an example of each.
4. Mixtures can be classified as a solution, a colloid or a suspension. Look at the chart below. It lists different types of mixtures. Determine if the mixture is a solution, a colloid or a suspension and put a check in the correct box.

|  |  |  |  |
| --- | --- | --- | --- |
| **Mixture** | **Solution** | **Colloid** | **Suspension** |
| Sugar water |  |  |  |
| Homogenized milk |  |  |  |
| Coffee |  |  |  |
| Salad dressing |  |  |  |
| Whipped cream |  |  |  |
| Food coloring |  |  |  |
| Butter |  |  |  |
| Lemonade |  |  |  |