**Report No. (1): Percent Composition of Zinc and Copper in coins.**

Student Names: …………………………………………………………………… Section No:……………

**Results and calculation:**

1. You will now create a excel table for of the metals might look like this:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| objects | mass (g) | Volume before  (mL) | Volume after (mL) | Volume object (mL) | d (g/mL) |
| Cu | **-** | **-** | **-** | **-** | **8.94** |
| Zn | **-** | **-** | **-** | **-** | **7.14** |
| nails | **30.3454** | **23.20** | **26.80** |  |  |
|  | **30.3455** | **23.20** | **26.80** |  |  |
|  |  |  |  | Average |  |
|  |  |  |  | % Error |  |
|  |  |  |  | % Precision |  |

1. Create a table that correlates the density of a Cu/Zn composite (nails) to the percent Cu present.

|  |  |
| --- | --- |
| p % Cu | Density of Cu/Zn composite(g/mL) |
| 0 |  |
| 15 |  |
| 25 |  |
| 55 |  |
| 75 |  |
| 100 |  |

1. Plot a graph that correlates the density of a Cu/Zn composite (nails) to the percent

Cu present.

4. Do a LINEST analysis as outlined in your Error Analysis handout.

1. Using the average nail density that you determined experimentally. and the equation for the line in your

graph, determine the % composition of Cu and Zn in the nail