**Significant Digit, Scientific Notation, Graphing & Conversion Quiz**

1. Calculate the following questions and write the answer in the correct number of **significant digits**. Use scientific notation only where it is necessary.
2. 128 ÷ 0.4050 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 776 x 1.02 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 0.060 x 39.6 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Significant Digits in Addition and Subtraction Problems ***(REMEMBER THESE ARE THE QUESTIONS where you need to look at the decimal places!)***
6. 4.678 + 12.3 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪
7. 65.13 – 33.456 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪
8. 90.000 – 70.0 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪
9. Convert the following. Make sure your final answer is in **significant digits** (and scientific notation if necessary).
10. 2000mm into m
11. 0.05L into mL
12. 35 km/h into m/s
13. Graphing

A student performed an experiment to investigate how changing the current flowing through a resistor would affect the voltage across the resistor. The student would select a specific current value and then measure the voltage. The student repeated this over with several different current values. The results are shown in the table below. ***(Marks : proper x and y axis labels and title, appropriate scale, all points plotted and line of best fit drawn= 4 marks)***

|  |  |
| --- | --- |
| **Current (A)** | **Voltage (V)** |
| 0.10 | 0.36 |
| 0.15 | 0.53 |
| 0.20 | 0.73 |
| 0.25 | 0.82 |
| 0.30 | 0.96 |
| 0.35 | 1.21 |
| 0.40 | 1.47 |
| 0.45 | 1.62 |

