

## Chemistry: Chapter 1 Significant Figures Worksheet

**Count the number of sig. figs in the following measurements.**

- |                                 |                     |
|---------------------------------|---------------------|
| 1) 67.05 mL _____               | 2) 0.003 kg _____   |
| 3) 45,000 L _____               | 4) 54.70 cm _____   |
| 5) 194.3 m <sup>2</sup> _____   | 6) 230. mm _____    |
| 7) 29,037 cm <sup>2</sup> _____ | 8) 0.08200 mg _____ |
| 9) 500 g _____                  | 10) 2 inches _____  |

**Solve the following arithmetic problems and give the answers with the correct number of sig. figs.**

- |   |                               |
|---|-------------------------------|
| 11) 74.862 - 3.34   | 12) 6.224 + 2.5392 + 4.2      |
| 13) 5.635 × 2   | 14) 23.552/3.0                |
| 15) $\frac{6.93 - 2.0}{4.100} + \frac{1.90 \times 2.0}{1.26}$ | 16) (64.78)(92) + (50.)(75.2) |

### **Reminders of Sig. Fig. Rules**

<u>Count Rule 1:</u>	Non-zero digits always count
<u>Count Rule 2:</u>	In a number less than 1, leading zeroes never count
<u>Count Rule 3:</u>	Zeroes between non-zero digits always count
<u>Count Rule 4:</u>	Zeroes at the end of decimal digits always count
<u>Count Rule 5:</u>	Zeroes in a whole number only count if there's a decimal after them or a bar above them.

<u>Operation Rule 1:</u>	Addition & Subtraction: Restricted by the fewest number of decimal places
<u>Operation Rule 2:</u>	Multiplication & Division: Restricted by the fewest number of sig. figures