

## Significant Figures Worksheet

How many significant figures are in each of the following numbers?

- |                      |                                    |
|----------------------|------------------------------------|
| 1) 5.40 mL _____     | 13) $1.2 \times 10^3$ g _____      |
| 2) 210 s _____       | 14) 0.00120 L _____                |
| 3) 801.5 g _____     | 15) 0.0102 mL _____                |
| 4) 1,000 kg _____    | 16) $9.010 \times 10^{-6}$ s _____ |
| 5) 101.0100 kg _____ | 17) 2,370.0 g _____                |
| 6) 4.53 mL _____     | 18) 0.070 g _____                  |
| 7) 2.30 g _____      | 19) 0.707 mL _____                 |
| 8) 1.02 s _____      | 20) 7070 kg _____                  |
| 9) 4500 g _____      | 21) 0.700 g _____                  |
| 10) 3200. L _____    | 22) 7.070 g _____                  |
| 11) 0.002 g _____    | 23) $1.02 \times 10^2$ L _____     |
| 12) 1.000 mL _____   | 24) $3.4 \times 10^4$ g _____      |

25) Why are significant figures important when taking data in the laboratory?

26) Why are significant figures NOT generally used in your math class?

27) Using two different instruments, I measured the length of my foot to be 27 centimeters and 27.00 centimeters. Explain the difference between these two measurements.

## Significant Figures Worksheet

How many significant figures are in each of the following numbers?

- |                         |                                       |
|-------------------------|---------------------------------------|
| 1) 5.40 mL <u>3</u>     | 13) $1.2 \times 10^3$ g <u>2</u>      |
| 2) 210 s <u>2</u>       | 14) 0.00120 L <u>3</u>                |
| 3) 801.5 g <u>4</u>     | 15) 0.0102 mL <u>3</u>                |
| 4) 1,000 kg <u>1</u>    | 16) $9.010 \times 10^{-6}$ s <u>4</u> |
| 5) 101.0100 kg <u>7</u> | 17) 2,370.0 g <u>5</u>                |
| 6) 4.53 mL <u>3</u>     | 18) 0.070 g <u>2</u>                  |
| 7) 2.30 g <u>3</u>      | 19) 0.707 mL <u>3</u>                 |
| 8) 1.02 s <u>3</u>      | 20) 7070 kg <u>3</u>                  |
| 9) 4500 g <u>2</u>      | 21) 0.700 g <u>3</u>                  |
| 10) 3200. L <u>4</u>    | 22) 7.070 g <u>4</u>                  |
| 11) 0.002 g <u>1</u>    | 23) $1.02 \times 10^2$ L <u>3</u>     |
| 12) 1.000 mL <u>4</u>   | 24) $3.4 \times 10^4$ g <u>2</u>      |

- 25) Why are significant figures important when taking data in the laboratory?

*This is how you communicate the degree of certainty of your measurements*

- 26) Why are significant figures NOT generally used in your math class?

*The numbers used are generally not measurements*

- 27) Using two different instruments, I measured the length of my foot to be 27 centimeters and 27.00 centimeters. Explain the difference between these two measurements.

*27 cm was measured with an instrument like this:* 

*27.00 cm was measured with an instrument like this:* 