

## Chpt 2 rev 7

List the number of sig. Figs. Each measurement has:

- |               |                           |                     |
|---------------|---------------------------|---------------------|
| 1. 0.005600 m | 2. 340.0 g                | 3. 0.0005 ml        |
| 4. 3.0001 km  | 5. $2.3 \times 10^{16}$ m | 6. 93,000,000 miles |

Round the following measurements to the number of sig. figs. listed:

- |                |                                |                 |
|----------------|--------------------------------|-----------------|
| 7. (3) 3.145 m | 8. (1) $9.80665 \text{ m/s}^2$ | 9. (2) 9.9634 m |
| 10. (1) 57 km  | 11. (4) 0.00234517 mm          | 12. (3) 80966 g |

Perform the following operations using sig. Figs.:

- |   |  |
|---|--|
| 13. $44.98 \text{ g} + 6.9 \text{ g} =$       | 14. $1.235 \text{ kg} \times 0.8 \text{ m/s} =$        |
| 15. $0.9965 \text{ N} \times 1.2 \text{ s} =$ | 16. $0.02 \text{ m/s}$ divided by $2.35 \text{ m/s} =$ |
| 17. $35.5 \text{ ml} - 17 \text{ ml} =$       | 18. $0.237 \text{ g} + 2.5 \text{ g} + 13 \text{ g} =$ |

Convert the following:

19.  $3400 \text{ cm} =$  \_\_\_\_\_ Mm      20.  $0.022 \text{ Gl} =$  \_\_\_\_\_ ml

21.  $344 \text{ m/s} =$  \_\_\_\_\_ miles/hr      22.  $1100 \text{ ft/s} =$  \_\_\_\_\_ m/s ...  $3.28 \text{ ft} = 1 \text{ m}$
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Uncertainty of ruler is +/- .01 cm

23. You measure a piece of wood to be 5.67 cm by 3.45 cm by 4.56 cm. What the percentage of uncertainty of each measurement?