

# 1 • Observations, Models, & Experiments

## SCIENTIFIC NOTATION & UNIT ANALYSIS

Change the following to Scientific Notation (maintain the number of significant figures):

- |                           |                         |
|---------------------------|-------------------------|
| 1. 5.280 = _____          | 11. 2,560 = _____       |
| 2. 2,000 = _____          | 12. .0009 = _____       |
| 3. 15 = _____             | 13. 8,900,000 = _____   |
| 4. 6,589,000 = _____      | 14. .0920 = _____       |
| 5. 70,400,000,000 = _____ | 15. 6,300 = _____       |
| 6. .00263 = _____         | 16. .90 = _____         |
| 7. .00589 = _____         | 17. 250 = _____         |
| 8. .006 = _____           | 18. .006087 = _____     |
| 9. .400 = _____           | 19. 500,000 = _____     |
| 10. .08060 = _____        | 20. .0000000105 = _____ |

Make the following Metric System conversions using “unit analysis” (you may use scientific notation):

- |              |                  |
|--------------|------------------|
| 1. 100 mg    | _____ = _____ g  |
| 2. 20 cm     | _____ = _____ m  |
| 3. 50 L      | _____ = _____ kL |
| 4. 22 g      | _____ = _____ cg |
| 5. 825 cm    | _____ = _____ km |
| 6. 2,350 kg  | _____ = _____ g  |
| 7. 19 mL     | _____ = _____ cL |
| 8. 52 km     | _____ = _____ m  |
| 9. 36 m      | _____ = _____ cm |
| 10. 18 cm    | _____ = _____ mm |
| 11. 6 g      | _____ = _____ mg |
| 12. 4,259 mg | _____ = _____ g  |