

Unit 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 |