

Name: _____

Block: _____

Date: _____

Chemistry 11

Dimensional Analysis Key

Assignment

1. a) 6.2×10^{-9} m b) 26.4 L c) 8.92×10^8 ms d) 2.67 kg/L e) 5.6×10^3 Mm into dm
f) 567.9 L g) 6.77×10^8 ms h) 7.95×10^{-3} kg/L i) 100 dm^3
2. 0.855L
3. 1.5×10^8 km
4. \$7900
5. 3.84×10^{11} mm
6. 31 m/s
7. 6.5×10^6 min
8. 1.05×10^{-3} ng
9. 1.15×10^{-4} g
10. 4.05×10^{-8} km
11. 7.50 m/mL
12. 15.3 in^3
13. 1.66×10^4 min
14. 1000 packs to coat your lungs with 4oz of tar; 100 packs to take in 1g of nicotine
15. 2.0×10^2 mi
16. 2100 h
17. 8×10^{-4} m/s
18. a) No, equal volumes of sand and gold would have drastically different masses
b) 19 kg or 1.9×10^4 g ; playing catch with the idol would not be possible.