

Multiple Conversions Dimensional Analysis Day 2

Name _____ Class Period _____

Conversions Factors

| | | | |
|---------------------------|--------------------|--------------------------|---------------------------|
| 1 kg = 2.2 lbs | 0.621 mi = 1.00 km | 1 gal = 3.79 L | 2.54 cm = 1 in |
| 1 cc is 1 cm ³ | 20 drops = 1 mL | 1 mL = 1 cm ³ | 264.2 gal = 1 cubic meter |

Solve each problem using dimensional analysis. Every number must have a unit. Work must be shown. Use the conversion factors from above as well as the ones from notes given.

1. 30 gallons per 20 minutes is how many cubic meters per day?

2. 500 inches per 150 second to cm per minutes

3. 35 pints per 5 ounces to gallons per pound

4. 6 Tons per 95 Km to Kilograms per meters

5. 2 miles per 3 minutes to yards per hours

6. 3 weeks per 7,000 m to hrs per km

7. 5 hours per 32 gallons to seconds per mL

8. 45 drops per 30 seconds to mL per minute

9. 30 miles per hour to Km per hour

10. 120 meter per 10 minutes to miles per hour