

## Unit Conversions and the Factor Label Method

Use dimensional analysis to perform the following conversions. Show all work; include units on all numbers and round each answer using the rules for significant figures.

1) 500 mL = \_\_\_\_\_ L

11) 4.2 L = \_\_\_\_\_ cm<sup>3</sup>

2) 25 cg = \_\_\_\_\_ g

12) 0.35 km = \_\_\_\_\_ m

3) 400 mg = \_\_\_\_\_ kg

13) 2.3 L = \_\_\_\_\_ mL

4) 30 cm = \_\_\_\_\_ mm

14) 4.5 yd = \_\_\_\_\_ in

5) 3500 s = \_\_\_\_\_ hr

15) 50. mm = \_\_\_\_\_ km

6) 2 yr = \_\_\_\_\_ s

16) 150 mg = \_\_\_\_\_ g

7) 15 m = \_\_\_\_\_ mm

17) 150. kg = \_\_\_\_\_ g

8) 0.75 L = \_\_\_\_\_ mL

18) 23 mL = \_\_\_\_\_ L

9) 6.4 kg = \_\_\_\_\_ g

19) 0.156 g = \_\_\_\_\_ mg

10) 7200 m = \_\_\_\_\_ km

20) 1.25 L = \_\_\_\_\_ mL

1 hr=60 min, 1 min=60 s, 1yd=3 ft, 1 ft=12 in, 1 yr=365 d, 1 mL=1 cm<sup>3</sup>