

Extra Dimensional Analysis Problems

Name \_\_\_\_\_

Date \_\_\_\_\_

Class Period \_\_\_\_\_

1 mile = 5,280 ft  
1 inch = 2.54 cm  
3 feet = 1 yard  
454 g = 1lb  
946 mL = 1 qt  
4 qt = 1 gal

Don't forget: What you want  
What you've got

Cancel your units!

1) 3.7 miles to inches

5) 2300 seconds to weeks

2) 5 lbs/gal to g/mL

6) 94 inches to kilometers

3) 18 ft/sec to meters/min

7) 3 gal to cL

4) 14 mph to cm/sec

8) 8 g/cm to lbs./ft

9) Jules Verne wrote a book called Twenty Thousand Leagues Under the Sea. Using the conversion factors given, convert 20,000 leagues into inches

12 in = 1ft      3ft=1 yd      1 fathom = 2 yds

1 statute mile = 5280 ft    1 nautical mile = 6080 ft      1 league = 3 nautical miles

10) Some owls maintain a territory of up to 3 acres. How many owls could live in a large wooded area of 20 hectares if there is only one owl for every 3 acres?

1 hectare = 1 square decameter = 100 square meters = 2.47 acres

11) Light travels at a speed of 186,000 miles per second. How many kilometers will it travel in 2 hours? 1 mile = 1.609 km

12) Your automobile can travel 42 miles on a gallon of gas. Los Angeles is 350 miles from San Ramon. Gas costs \$3.00 per gallon. How much money will you spend on gas to drive from here to LA?