

Dougherty Valley HS Chemistry

Name: _____ Period: ____ Seat #: _____

I'm Not Dense About Density!

METRIC PRACTICE: Convert the following numbers from one unit to the other:

1) 128 km = _____ cm	2) 327 m = _____ Hm
3) 4324 mg = _____ Kg	4) 23 dm = _____ Km
5) 1,589 DL = _____ mL	6) 389 ml = _____ L

DENSITY PROBLEMS: Use the information given to solve for the unknown value:

Q#	<i>Answers are in parenthesis, but do not have units! You must show your work and include units!</i>
7	What is the equation for density?
8	If an object weighs 34.8-grams and has a volume of 22.8-mL, what is this objects density? (1.53)
9	A 150.0-mL balloon has 3.3-g of helium inside of it, what is the density of the helium? (0.022)
10	What is the density of an unknown metal weighing 120.0-g and taking up 58.3-cm ³ of space? (2.06)
11	Define Density in words, not an equation.
12	Most of the buildings on the Indiana University campus are made of limestone. Limestone has a density of 2.72 g/cm ³ . What is the mass of a 24.9 cm ³ block of limestone? (67.7)
13	Find the <u>volume</u> of a liquid which has a density of 1.85-g/mL and 'weighs' 5.56 g. (3.01)
14	Find the <u>mass</u> of 3.8-mL mercury in a thermometer. The density of Hg is 13.5-g/cm ³ (51)
15	What is the volume of a piece of tungsten if its density is 19.3-g/mL and the mass of the tungsten is 0.2305-kg? (11.9)