

Name: _____ Section: _____

Density Practice Problems - <http://www.fordhamprep.com/gcurran/sho/sho/lessons/lesson27.htm>

Directions: Use the density formula below to derive a formula for calculating mass and a formula for calculating volume. *Approach this as if you were solving for an unknown in math class.* Once you have all three formulas, use them to solve questions 1-6.

Mass =	Density = $\frac{\text{Mass}}{\text{Volume}}$	Volume =
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- 1) What is the mass of a 350 cm^3 sample of pure silicon with a density of 2.336 g/cm^3 ?
- 2) A student finds a rock on the way to school. In the laboratory he determines that the volume of the rock is 22.7 cm^3 , and the mass is 39.943 g . What is the density of the rock?
- 3) The density of lead is 11.342 g/cm^3 . What would be the volume of a 200.0 g sample of this metal?
- 4) The density of silver is 10.49 g/cm^3 . If a sample of pure silver has a volume of 12.993 cm^3 , what would the mass be?
- 5) If 30.943 g of a liquid occupy a space of 35.0 ml , what is the density of the liquid in g/cm^3 ?
- 6) Pure gold has a density of 19.32 g/cm^3 . How large would a piece of gold be if it had a mass of 318.97 g ?

Practice Density Quizzes

<http://www.fordhamprep.com/gcurran/sho/sho/students/classof03/kenna1.htm>

<http://www.fordhamprep.com/gcurran/sho/sho/students/classof03/kenna2.htm>