

Here is a list of topics on October 12th's quiz. Your notes and your textbook are good things to use while reviewing!

density lab exercise

volume

scientific notation

volume units

volume measuring tools

density

volume conversions

density units

density problems

conversion

density of water

significant figures rules with adding, subtracting, multiplying, and dividing

Practice questions (SHOW YOUR WORK!!!):

$$\begin{array}{r}
 1) \quad 16.5 \text{ g} \\
 12.8 \text{ g} \\
 + \underline{20.234 \text{ g}} \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 2) \quad 13.4 \text{ g} \\
 + \underline{0.05 \text{ g}} \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 3) \quad 23.27 \text{ km} \\
 - \underline{12.058 \text{ km}} \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 4) \quad 13.57 \text{ g} \\
 - \underline{6.3 \text{ g}} \\
 \hline
 \end{array}$$

5) The density of mercury is 13.6 g/mL. What is the mass of 401 mL of mercury? [5450 g]

$$D = \underline{\hspace{2cm}}$$

$$m = \underline{\hspace{2cm}}$$

$$V = \underline{\hspace{2cm}}$$

6) A solution has a volume of 8.33 cm³ and a mass of 9.7 g. What is its density? [1.2 g/cm³]

$$D = \underline{\hspace{2cm}}$$

$$m = \underline{\hspace{2cm}}$$

$$V = \underline{\hspace{2cm}}$$

7) Convert 45.7 cm to meters: [0.457 m]

8) Convert 0.060 kL to mL: [60 000 mL]

- 9) What makes one chemical more dense than another? _____

- 10) How is density related to floating? _____

- 11) What is volume? _____

- 12) The density of hydrochloric acid is 1.1639 g/cc. What volume of hydrochloric acid would be equal to 30.0 g? [25.8 cc]
D = _____
m = _____
v = _____
- 13) Summarize how the density of a liquid can be measured and calculated (think lab!): _____

- 14) Convert 3.02 days to seconds: [261 000 s]
- 17) The density of beryllium is 1.848 g/mL. If I put a piece of beryllium in a beaker of water, would it sink or float? Explain your prediction.

- 18) Put the following measurements into scientific notation:
- a) 5 453 000 m = _____
- b) 0.00736 ng = _____
- c) 304 800 kA = _____
- d) 0.012030 mol = _____