

Name: _____

Chemistry Quiz #1 - SNC 1D

1. For each of the following, identify as an:
- element
 - compound
 - solution
 - colloid
 - suspension
 - mechanical mixture

lithium	element
clear apple juice	solution
muddy water	suspension
air	solution
potassium sulphate (K_2SO_4)	compound
brass (a metal made from 67% copper and 33% zinc by mass)	solution
acetyl salicylic acid (ASA - also known as aspirin), has a chemical formula of $C_9H_8O_4$	compound
silver metal	element
a fish	mechanical mixture
suntan lotion	colloid

2. Is the rusting of a nail considered a physical or a chemical change, explain! (point form is fine)

chemical change, a new substance is formed

3. Although mass is a quantitative physical property, why can it not be used to identify a substance.

mass simply tells you how much of a substance you have, it does not tell you anything specific about that substance (such as density, melting point, boiling point)

mega M	kilo k	hepto h	deca da	base unit	deci d	centi c	milli m	micro μ
←	←	←	←	←	←	←	←	←
÷1000	÷10	÷10	÷10	÷10	÷10	÷10	÷10	÷1000
→	→	→	→	→	→	→	→	→
x1000	x10	x10	x10	x10	x10	x10	x10	x1000

4. Determine the mass in g of a piece of silver with a volume of 0.585 L if the density of silver is 10.50 mg/mL. Use the full format followed in class.

$m = ? \text{ (g)}$ $D = 10.50 \text{ (mg/mL)}$ $V = 0.585 \text{ L} \rightarrow 585 \text{ mL}$	$m = DV$ $m = 10.50 \text{ mg/mL} \times 585 \text{ mL}$ $m = 6142.5 \text{ mg}$ $m = 6.1425 \text{ g}$
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5. Determine the mass in kg of 25.00 L of vinegar, if the density of vinegar is 1.050 g/mL

$m = ? \text{ (kg)}$ $D = 1.050 \text{ g/mL}$ $V = 25.00 \text{ L} \rightarrow 25\,000 \text{ mL}$	$m = DV$ $m = 1.050 \text{ g/mL} \times 25\,000 \text{ mL}$ $m = 26250 \text{ g}$ $m = 26.25 \text{ kg}$
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