ALASKA CHEMISTRY · UNIT 3 · 10 QUESTIONS

Stoichiometry and Solutions — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The number of moles in 20 g of sodium hydroxide is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **After a reaction finishes, the reactant left over is the**

A. limiting reactant

B. catalyst

C. product

D. excess reactant

Understand It with Pulse | Flag a mistake

3 **A compound contains 24 g of carbon (2 mol) and 4 g of hydrogen (4 mol). The number of hydrogen atoms per carbon atom in its empirical formula is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A molecular formula is**

A always the same as the empirical formula

B the simplest ratio of atoms

C a whole number multiple of the empirical formula

D the mass of one mole

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5 **The percent by mass of sodium in sodium chloride, to one decimal place, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A 100 mL sample of 2.0 M solution is diluted to 500 mL. The new molarity, in moles per liter, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **An unsaturated solution**

A can dissolve more solute at that temperature

B cannot dissolve more solute

C contains no solvent

D contains no solute

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8 **In the reaction $2Mg + O_2 \rightarrow 2MgO$,**
the mass, in grams, of magnesium oxide formed from 1 mol of magnesium is _____

ANSWER _____

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9 **At standard temperature and pressure, the volume, in liters, of 0.5 mol of hydrogen gas is ____**

ANSWER _____

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10 **The theoretical yield of a reaction is**

A the amount actually collected

B the maximum amount possible from the limiting reactant

C always less than the actual yield

D the amount of excess reactant

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ANSWER KEY

1.	0.5	**5.**	39.7	**9.**	11.2
2.	D	**6.**	0.4	**10.**	B
3.	2	**7.**	A		
4.	C	**8.**	40		

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