SOUTH CAROLINA CHEMISTRY · UNIT 3

# Stoichiometry and Solutions — Practice Test

**South Carolina Chemistry • 10 questions**

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 molarity, in moles per liter, of a solution containing 0.5 mol of solute in 0.25 L is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

**2** **A balanced chemical equation conserves**

A. mass

B. volume only

C. temperature

D. pressure

Understand It with Pulse | Flag a mistake

3 **The percent by mass of hydrogen in water, to one decimal place, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **After a reaction is complete, the excess reactant**

A is completely used up

B becomes a catalyst

C disappears from the equation

D remains in some amount

Understand It with Pulse | Flag a mistake

5 **In the reaction $CH_4 + 2O_2 \rightarrow CO_2 + 2H_2O$,**
**the moles of carbon dioxide formed from 2 mol of methane is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **In the reaction $CaCO_3 \rightarrow CaO + CO_2$, the mass, in grams, of calcium oxide formed from 1 mol of calcium carbonate is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **In an aqueous solution, the solvent is**

A the solute

B water

C a gas

D a precipitate

Understand It with Pulse | Flag a mistake

8 **At standard temperature and pressure, the volume, in liters, of 2 mol of gas is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

**9** **A reaction has a theoretical yield of 50 g and an actual yield of 40 g. The percent yield is**

- **A** 125%
- **B** 20%
- **C** 80%
- **D** 90%

Understand It with Pulse | Flag a mistake

**10** **The number of moles in 100 g of calcium carbonate is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

# ANSWER KEY

| | | | | | |
|---|---|---|---|---|---|
| **1.** | 2 | **5.** | 2 | **9.** | C |
| **2.** | A | **6.** | 56 | **10.** | 1 |
| **3.** | 11.1 | **7.** | B | | |
| **4.** | D | **8.** | 44.8 | | |

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