QUEBEC SCIENCE AND TECHNOLOGY, SECONDARY IV · UNIT B

# Material World - Chemical Changes — Practice Test

**Quebec Science and Technology, Secondary IV • 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 **In a closed reaction 10 grams of reactant A and 15 grams of reactant B react completely. The total mass of products, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **In the balanced equation $CH_4$ plus 2 $O_2$ gives $CO_2$ plus 2 $H_2O$, the number of oxygen atoms on the product side is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **In the balanced equation 2 $H_2$ plus $O_2$ gives 2 $H_2O$, the number of hydrogen atoms on the reactant side is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **In the balanced equation 2 Na plus $Cl_2$ gives 2 NaCl, the number of chlorine atoms on the reactant side is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **In the Rutherford Bohr model electrons occupy**

A the nucleus itself

B random clouds only

C the outer shell only

D energy levels around the nucleus

Understand It with Pulse | Flag a mistake

6 **Photosynthesis uses carbon dioxide and water to produce glucose and**

A nitrogen

B salt

C methane

D oxygen

Understand It with Pulse | Flag a mistake

7 **Pure water at room temperature has pH**

A 3

B 11

C 7

D 14

Understand It with Pulse | Flag a mistake

8 **The law of conservation of mass states that mass is neither created nor**

A changed by heating

B lost in all reactions

C destroyed in a reaction

D gained by cooling

Understand It with Pulse | Flag a mistake

9 **The pH scale measures the concentration of**

A hydrogen ions

B oxygen ions

C salt ions

D electrons

Understand It with Pulse | Flag a mistake

10 **When an acid and a base react completely the resulting solution is close to**

A strongly acidic

B strongly basic

C neutral

D pure acid

Understand It with Pulse | Flag a mistake

## ANSWER KEY

| | | | | | |
|---|---|---|---|---|---|
| **1.** | 25 | **5.** | D | **9.** | A |
| **2.** | 4 | **6.** | D | **10.** | C |
| **3.** | 4 | **7.** | C | | |
| **4.** | 2 | **8.** | C | | |

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