

Quiz for Video 4 – Balancing Chemical Reactions

- Which of the following is equal to 1 mole in chemistry?
 - 6.02×10^{23}
 - 1.699×10^{21}
 - A small woodland creature
 - 1023
- How is the molar mass of an atom found?
 - From its atomic number on the periodic table
 - From its atomic mass on the periodic table
 - From the ions it forms
 - It must be memorized
- How do we calculate the molar mass of a compound?
 - From the largest atom in a compound
 - By multiplying by 1 mole
 - By dividing by atomic number
 - By adding the molar masses of all atoms
- With what number should replace "?" to balance the following chemical reaction:
 $\text{C}_3\text{H}_8 + 5\text{O}_2 \rightarrow 3\text{CO}_2 + ? \text{H}_2\text{O}$
 - 2
 - 3
 - 4
 - 5
- What do we call the left side of a chemical reaction equation?
 - The initiates
 - The reactants
 - The lefterlys
 - The ingredients
- Consider the following reaction:
 $2 \text{HCl} + \text{Mg} \rightarrow \text{MgCl}_2 + \text{H}_2$
How many total atoms of hydrogen are present on the reactant side?
 - 1
 - 2
 - 4
 - 1.008
- I burn 0.5 moles of methane in excess oxygen according to the reaction:
 $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}$. How many moles of water will be formed?
 - 0.25 moles H_2O
 - 0.50 moles H_2O
 - 1.0 moles H_2O
 - 2.0 moles H_2O
- If I have 4 pieces of cheese and 1,000,000 pieces of bread, how many sandwiches can I make? (Assume 1 cheese and 2 bread per sandwich)
 - 2
 - 4
 - 500,000
 - 1,000,000
- If we know that 5g of compound A is consumed in the following reaction, how many grams of C should be produced?
 $\text{A} + 2\text{B} \rightarrow 3\text{C}$
 - 5g
 - 15g
 - 3g
 - Not enough info
- Consider the following reaction:
 $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}$
How many grams of CO_2 are produced from burning 10g of CH_4 ?
 - 10g
 - 16g
 - 28g
 - 44g