



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



**Sub: Physical Science**

**Class: 8**

**Date: 03.07.20**

**Duration: 40 min**

**Worksheet Solution 54**

**Full Marks: 15**

## LANGUAGE OF CHEMISTRY

**Choose the Correct options:**

- In a chemical equation, on what side of the arrow are the reactants?  
(a) **Left**  
(b) right  
(c) Above  
(d) Below
- In a chemical equation, on what side of the arrow are the products?  
(a) Left  
(b) **right**  
(c) Above  
(d) Below
- Which of the following can be changed to balance a chemical equation?  
(a) Products  
(b) Element  
(c) **coefficients**  
(d) subscripts
- A chemical equation is balanced when the number of each type of \_\_\_\_\_ is the same on both sides of the yield sign.  
(a) Compound  
(b) molecule  
(c) formula  
(d) **atom**
- Which of the following equations is balanced?  
(a)  $2\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$   
(b)  $\text{H}_2 + 2\text{O}_2 \rightarrow 2\text{H}_2\text{O}$   
(c)  $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$   
(d)  **$2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$**
- What does the arrow in a chemical equation mean?  
(a) Matches  
(b) **Yields**  
(c) equals  
(d) mixes
- Which of the following describes the law of conservation of mass?  
(a) Reactants + Products = 100%  
(b) **Matter (mass) cannot be created or destroyed in ordinary chemical and physical changes, but it can change form**  
(c) Mass of products does not equal mass of reactants  
(d) Matter (mass) can be created or destroyed in certain chemical reactions.
- Which coefficient will balance the following equation?  
 $\text{Zn} + \underline{\quad} \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$   
(a) **2**  
(b) 6  
(c) 4  
(d) 3

9. Which coefficient will balance the following equation?



- (a) 6
- (b) 3**
- (c) 1
- (d) 2

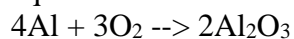
10. What is a coefficient?

- (a) The large number to the left of a chemical formula.**
- (b) The small number on the right of the chemical symbol.
- (c) The small number on the left of a chemical symbol
- (d) The large number at the end of a chemical formula

11. Which chemical equation is balanced?

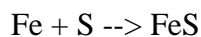
- (a)  $\text{Li} + \text{F}_2 \rightarrow 3\text{LiF}$
- (b)  $2\text{Li} + \text{F}_2 \rightarrow \text{LiF}$
- (c)  $2\text{Li} + \text{F}_2 \rightarrow 2\text{LiF}$**
- (d)  $2\text{Li} + \text{F}_2 \rightarrow 3\text{LiF}$

12. How many atoms of aluminum are on each side of the yield sign in the following equation?



- (a) 2
- (b) 6
- (c) 1
- (d) 4**

13. Is the following equation balanced or unbalanced?



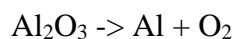
- (a) Balanced**
- (b) Unbalanced
- (c) Incomplete
- (d) None of these

14. Which of the following is the correct balanced equation for the unbalanced equation shown?



- (a)  $2\text{H}_2 + \text{Cl}_2 \rightarrow 4\text{HCl}$
- (b)  $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$**
- (c)  $3\text{H}_2 + 3\text{Cl}_2 \rightarrow \text{HCl}$
- (d)  $3\text{H}_2 + \text{Cl}_2 \rightarrow 3\text{HCl}$

15. Balance this equation:



- (a)  $2\text{Al}_2\text{O}_3 \rightarrow 2\text{Al} + 3\text{O}_2$
- (b)  $2\text{Al}_2\text{O}_3 \rightarrow 4\text{Al} + 3\text{O}_2$**
- (c)  $3\text{Al}_2\text{O}_3 \rightarrow 2\text{Al} + \text{O}_2$
- (d)  $2\text{Al}_2\text{O}_3 \rightarrow 3\text{Al} + 2\text{O}_2$