# ST. LAWRENCE HIGH SCHOOL A JESUIT CHRISTIAN MINORITY INSTITUTION 

Sub: Physical Science
Duration: $\mathbf{4 0} \mathbf{~ m i n}$

Class: 8
Worksheet Solutions 56
Date: 06.07.20
Full Marks: 15

## LANGUAGE OF CHEMISTRY

## Choose the Correct options:

1-The reactants are written on the
(A) left hand side
(B) right hand side
(C) middle
(D) any of the above

2- The products are written on the
(A) left hand side
(B) right hand side
(C) middle
(D) any of the above

3-The chemical equation is balanced if
(A) mass is same on both the sides of the equation
(B) number of atoms of each element is same on both the sides of the sides
(C) both (A) and (B)
(D) none of the above

4-If the mass is not the same on both sides of the equation, such a chemical equation is a
(A) dead chemical equation
(B) skeletal chemical equation
(C) Imperfect chemical equation
(D) Improper chemical equation

5-Which of the following is a balanced chemical equation?
(A) $\mathbf{Z n}+\mathrm{H}_{2} \mathrm{SO}_{4} \rightarrow \mathrm{ZnSO}_{4}+\mathbf{H}_{\mathbf{2}}$
(B) $\mathrm{Zn}+\mathrm{H}_{2} \mathrm{SO}_{4} \rightarrow \mathrm{ZnSO}_{4}+2 \mathrm{H}_{2}$
(C) $\mathrm{Zn}+\mathrm{H}_{2} \mathrm{SO}_{4} \rightarrow 2 \mathrm{ZnSO}_{4}+\mathrm{H}_{2}$
(D) $\mathrm{Zn}+\mathrm{H}_{2} \mathrm{SO}_{4} \rightarrow 2 \mathrm{ZnSO}_{4}+2 \mathrm{H}_{2}$

6-Which of the following(s) can be included in a chemical equation
(A) Physical states
(B) Temperature
(C) Catalyst
(D) All of the above

7-Chemical equations involve
(A) the breaking of bonds
(B) the making of bonds
(C) the breaking and making of bonds
(D) the shifting of bonds

8-A balanced chemical equation is in accordance with
(A) Avogadro's law
(B) Law of multiple proportion
(C) Law of conservation of mass
(D) Law of gaseous volumes

9- The equation
$\mathrm{Cu}+\mathrm{xHNO}_{3}->\mathrm{Cu}\left(\mathrm{NO}_{3}\right)_{2}+\mathrm{yNO}_{2}+2 \mathrm{H}_{2} \mathrm{O}$
The values of $x$ and $y$ are
(A) 3 and 5
(B) 8 and 6
(C) 4 and 2
(D) 7 and 1

10- In the following equation:
$\mathrm{Na}_{2} \mathrm{CO}_{3}+\mathrm{xHCI}->2 \mathrm{NaCI}+\mathrm{CO}_{2}+\mathrm{H}_{2} \mathrm{O}$, the value of x is
(A) 1
(B) 2
(C) 3
(D) 4

11- In the balanced equation $-\mathrm{aFe}_{2} \mathrm{O}_{3}+\mathrm{bH}_{2} \rightarrow \mathrm{cFe}+\mathrm{dH}_{2} \mathrm{O}$ The value of $\mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$ are respectively -
(A) 1,1,2,3
(B) $1,1,1,1$
(C) $\mathbf{1 , 3 , 2 , 3}$
(D) $1,2,2,3$
12. Which of the following reactions is not balanced
(A) $2 \mathrm{NaHCO}_{3} \rightarrow \mathrm{Na}_{2} \mathrm{CO}_{3},+\mathrm{H}_{2} \mathrm{O}+\mathrm{CO}_{2}$
(B) $\mathbf{2 C} \mathbf{C}_{4} \mathbf{H}_{10}+\mathbf{1 2 0}_{2} \rightarrow \mathbf{8 C O}+\mathbf{1 0 H}_{2} \mathrm{O}$
(C) $2 \mathrm{AI}+6 \mathrm{H}_{2} \mathrm{O} \rightarrow 2 \mathrm{AI}(\mathrm{OH})_{3}+3 \mathrm{H}_{2}$
(D) $4 \mathrm{NH}_{3}+5 \mathrm{O}_{2} \rightarrow 4 \mathrm{NO}+6 \mathrm{H}_{2} \mathrm{O}$
13.The equation $-\mathrm{Cu}+\mathrm{xHNO} 3 \rightarrow \mathrm{Cu}(\mathrm{NO} 3) 2+\mathrm{yNO} 2+2 \mathrm{H} 2 \mathrm{O}$ The values of x and y are
(A) 3 and 5
(B) 8 and 6
(C) 4 and 2
(D) 7 and 1
14. Which of the following statements is correct
(A) A chemical equation tells us about the substances involved in a reaction.
(B) A chemical equation informs us about the symbols and formula of the substances involved in a reaction.
(C) A chemical equation tells us about the atoms or molecules of the reactants and products involved in a reaction.
(D) All are correct.
15.In the reaction $\mathrm{xPb}\left(\mathrm{NO}_{3}\right)_{2} \rightarrow$ Heat $\mathrm{yPbo}+\mathrm{zNO}_{2}+\mathrm{O}_{2} \mathrm{x}, \mathrm{y}$ and z are -
(A) $1,1,2$
(B) $\mathbf{2 , 2 , 4}$
(C) $1,2,4$
(D) $4,2,2$

