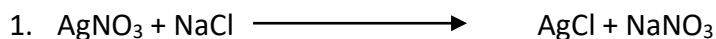


# Students' Zone – WORKSHEET # 1

## Chemistry Class IX

Choose the correct answer in the following questions.



The reaction is of type:

- a. Displacement Reaction  
b. Double Displacement Reaction  
c. Addition Reaction  
d. Combustion Reaction
2. The molecular mass of glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) is  
A. 180g  
B. 132a.m.u  
C. 180a.m.u  
D. 132g
3. Which of the following contains same no. of molecules as 9 g of water?  
A. 2 g of hydrogen gas  
B. 14 g of nitrogen gas  
C. 32 g of oxygen gas  
D. 44 g of carbon dioxide gas
4. Which of the following shows the correct group and period of the element  ${}_{12}^{24}\text{X}$

	Group	Period
A.	III A	2
B.	IIA	3
C.	IA	2
D.	IIIA	3

5. Aluminum has an atomic no. 13. Which of the following shows the correct No. of protons and electrons in  $\text{Al}^{3+}$  ion.

	No. of Protons	No. of Electrons
A.	13	13
B.	10	13
C.	13	10
D.	10	10

6. Metals have positive ions in a "sea of electrons".  
Which metal atom provides the most electrons for the sea?  
A. Aluminium  
B. Magnesium  
C. Sodium  
D. Zinc
7. An element X has two isotopes, which may be represented as  ${}^{238}\text{X}$  and  ${}^{235}\text{X}$ . How does  ${}^{238}\text{X}$  differ from  ${}^{235}\text{X}$ ?  
A. It has 3 more protons and 3 more electrons  
B. It has 3 more protons but no more electrons  
C. It has 3 more neutrons and 3 more electrons  
D. It has 3 more neutrons but no more electrons
8. Element X has an electronic structure 2,8,8,1. Element Y has an electronic structure 2,8,6.

## Students' Zone – WORKSHEET # 1

What is made when X and Y react?

	Type of Bond	Formula
A.	Covalent bond	$X_2Y$
B.	Covalent bond	$XY_2$
C.	Ionic bond	$X_2Y$
D.	Ionic bond	$XY_2$

9. Which of the following is an ionic compound?
- A. MgO  
B. CO<sub>2</sub>  
C. NH<sub>3</sub>  
D. HCl
10. If the empirical formula of compound is CH<sub>2</sub>O and the molecular mass is twice as of its empirical formula mass, then the molecular formula of the compound is
- A. C<sub>3</sub>H<sub>6</sub>O<sub>3</sub>  
B. C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>  
C. C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>  
D. C<sub>3</sub>H<sub>4</sub>O<sub>3</sub>
11. The table below shows the elements of halogen family. What happens to the electron affinity and shielding effect when we move down the group?

<sup>9</sup> F
<sup>17</sup> Cl
<sup>35</sup> Br
<sup>53</sup> I

	Electron affinity	Shielding effect
A.	Decreases	Increases
B.	Increases	Decreases
C.	Decreases	Decreases
D.	Increases	Increases

12. An element belonging to the group VII of the periodic table will form an ion
- A. X<sup>+7</sup>  
B. X<sup>-7</sup>  
C. X<sup>-1</sup>  
D. X<sup>+1</sup>
13. A sample of hydrogen gas has a volume of 20dm<sup>3</sup> at a pressure of 1.50 atm. What is its volume if it is compressed until its pressure is 5.0 atm?
- A. 66.66 dm<sup>3</sup>  
B. 6 dm<sup>3</sup>  
C. 22 dm<sup>3</sup>  
D. Volume remains same
14. Which of the following is an example of diffusion
- A. Bubbles rising in a beaker of boiling water  
B. Fragrance of flowers in a garden  
C. Swelling of raisins in water  
D. Steam condensing on a cold window
15. Which of the following is the crystalline form of Carbon?
- A. Graphite  
B. Coal

## Students' Zone – WORKSHEET # 1

- C. Charcoal D. Petroleum Coke
16. Which of the following is an example of the solution of *liquid in a gas*
- A. Alcohol in water C. Fog  
 B. Carbonated Water D. Amalgam
17. What is the percentage by mass of NaCl when 0.5g of NaCl is dissolved in 20g of water?
- A. 2.43g C. 43.6g  
 B. 97.57g D. 46.4g
18. Which of the following salts solubility decreases with the temperature?
- A. NaCl C. AgNO<sub>3</sub>  
 B. KCl D. Li<sub>2</sub>CO<sub>3</sub>
19. Identify the Reducing agent in the given equation.



- A. H<sub>2</sub>S C. HCl  
 B. Cl<sub>2</sub> D. S
20. Which of the following is a Weak Electrolyte
- A. H<sub>2</sub>CO<sub>3</sub> C. HCl  
 B. Na<sub>2</sub>SO<sub>4</sub> D. H<sub>2</sub>SO<sub>4</sub>

Which of the following CORRECTLY defines the phenomenon of Oxidation

	Electrons	Hydrogen	Oxygen
A.	Loss	Addition	Removal
B.	Gain	Removal	Addition
C.	Loss	Removal	Addition
D.	Gain	Addition	Removal

- Which of the following gas is liberated when alkali metals react with the water?
- A. Hydrogen Sulphide C. Hydrogen  
 B. Carbon dioxide D. Sulphur dioxide
21. Which of the following metals does NOT occur in free state in nature?
- A. Copper C. Silver  
 B. Gold D. Calcium
22. Potassium metal is kept under paraffin oil because it
- A. Is soft C. Has low melting point  
 B. Has low density D. Is highly electropositive
23. Which of the following halogen donot decomposes the water at all?
- A. Iodine C. Chlorine  
 B. Bromine D. Fluorine