

ST. XAVIER'S SCHOOL, PURULIA  
Class VI Subject – Chemistry

Ch-1  
Introduction To Chemistry

Date : 27.04.2020

F. Give reasons for the following:

1. Practicals are very important in chemistry.

Ans: Practicals are very important in chemistry because conclusions are drawn on the basis of practical work.

2. Chemistry is essential for human life.

Ans: Chemistry is essential for human life because the progress in modern society is largely based on the advances in chemistry. The various chemical compounds like fertilizers, insecticides, antibiotics are all due to advancement of chemistry.

3. Dishes used for evaporating substances are made of porcelain.

Ans: Dishes used for evaporating substances are made of porcelain because it can absorb a large amount of heat without breaking.

4. Test tubes are made of glass.

Ans: Test tubes are made of glass because it can withstand high temperature and also does not react with various chemicals.

G. Define the following terms:

1. Science- Science is the term for the broad field of human knowledge concerned with facts that are explained logically by rules, patterns or principles.

2. Hypothesis- Hypothesis is the possible explanation for an event that has occurred.

3. Scientific Method- Scientific method is the method by which scientists work to find out the best possible way to identify and solve a problem.

4. Mortar and Pestle- Solid substances are ground into powder in a mortar with the help of a pestle. The mortar and pestle are made of porcelain.

H. Answer the following questions:

1. What is the need of chemistry?

Ans: The progress in modern society is largely based on the advances in chemistry. Thus, some of the most essential needs for the living of humans require the use of various chemical compounds that include fertilizers, insecticides, antibiotics, building material etc.

2. Why do we use wire gauze, when a glass apparatus is heated?

Ans: We use a wire gauze whenever a glass apparatus is heated because a wire gauge ensures a uniform distribution of heat.

3. Give differences between a hard glass tube and test tube.

Ans: The differences are as follows:

Hard glass tube		Test tube	
i)	This is a cylindrical test tube but slightly bigger and made of hard glass.	i)	It is a cylindrical vessel closed at one end.
ii)	It is used for heating substances at high temperature. Therefore, it is also called a boiling tube.	ii)	It is used to perform chemical tests.

4. Write a short note on (a) funnel and (b) gas jar.

Ans: (a) Funnel: A funnel is a cone shaped wide glass vessel drawn into a narrow neck. It is used in filtration and for transferring liquids to containers. It prevents the spilling of the liquid being poured.

(b) Gas jar: A gas jar is a cylindrical vessel made of hard glass, and has a lid. It is used to collect and store gases..

Extra Questions:

I. Answer the following questions:

1. What is alchemy?

Ans: Alchemy was one of the earliest forms of chemistry which combined science, magic, philosophy and religion. Alchemists are the forerunners of the present day chemists.

2. What are the various steps involved in scientific method?

Ans: the various steps are as follows:

- (i) Identifying the problem.
- (ii) Gathering all the known information.
- (iii) Forming a hypothesis on the basis of experimental facts.
- (iv) Verification by other scientists and formation of theory.
- (v) Universal acceptance in the form of law.

3. Give few precautions to be taken in a chemistry laboratory.

Ans: A few precautions are as follows:

- (i) A laboratory coat or an apron must be worn to protect the clothings.
- (ii) Chemicals must not be tasted and its vapours must not be inhaled, unless asked by the teacher.
- (iii) Inflammable chemicals like alcohol, acetone should be kept away from the burner.
- (iv) If a chemical reagent gets into the eyes, mouth or on the skin, the affected area should be washed with cold water and the incident must be reported to the teacher immediately.

Home Assignment

You are to note down all the objective and subjective questions (The entire Exercise) neatly in your notebook. The notebook will be checked once the school reopens. You also need to draw all the laboratory apparatus and label them in your copy.

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