

29.6.21

Book Exercise

1. (a) Spirit lamp

Spirit lamp is used to heat up substances.

(b) Test tube

Test tube is used to conduct tests with small quantities of chemicals for heating and boiling purposes.

(c) Conical flask

Conical flask is used to hold sufficient quantities of substance in the form of solution.

(d) Evaporating dish

Evaporating dish is used for evaporating liquids.

(e) Wire gauze

Wire gauze is used to keep glass apparatus (flask, beaker) on while heating is in progress. It is also used for uniform distribution of heat.

(f) Beaker

Beaker is used for keeping solutions.

(g) Mortar and pestle

Mortar and pestle is used to grind and crush solid substances into a powder.

(h)

Measuring Cylinder

Measuring cylinder is used to measure the ~~no~~ volume of (mainly) liquid substances.

(i)

Glass tube

Glass tube is used to transfer fluids or gases from one vessel to another.

(j)

Gas jar

Gas jar is used for collecting gases and holding them in captivity.

(k)

Reagent bottle

Reagent bottle is used for storing chemicals.

2: (a) Test tube rack

Ans:- Test tube rack is made up of wood or plastic.

(b) Test tube holder

Ans:- Test tube holder is made up of an iron clamp at front and wood or plastic handle at other end.

(c) Measuring cylinder

Ans:- Measuring cylinder is made of glass.

(d) Wire gauze

Ans: Wire gauze is made of meshed iron wire and a thin asbestos sheet that is fixed at its centre.

(e) Mortar and pestle

Ans: Mortar and pestle is made of porcelain.

3. Five precautions to be taken in laboratory are:

1. Do not touch or taste any unknown substance.
2. Use only small quantity of chemical to carry out experiment.
3. Do not work alone in the laboratory.
4. Do not throw hot ~~conc~~ concentrated acids into the sink directly.
5. Always wear an apron in the laboratory to protect your clothes.
6. While heating keep the mouth of test tube away from your eyes and face.
7. The apparatus to be used in an experiment should be arranged neatly ~~be~~ before beginning an experiment.
8. Do not throw broken glass apparatus or used filter $\frac{1}{2}$ paper in the sink.

Throw them ~~in~~ in a dustbin.

4. (a) Chemistry is known as experimental science as an experiment ~~is~~ ~~is~~ is performed under controlled conditions in an activity and we observe a natural or an artificially created phenomenon.

(b) Most of the laboratory apparatus is made of glass because:

1. Glass is easy to clean.
2. Glass is ~~a~~ transparent material and we can see through it clearly.
3. It does not react with most of the chemicals used in experiments.
4. Glass withstands high ~~temper~~ temperatures.
5. Pyrex glass or borosil glass is a special type glass which hardly expands on heating. Such glasses do not break even at high temperatures.

- 5.
- | | | |
|---------------|-------------------|-----------------|
| 1. Glass tube | 4. Burner | 7. Water trough |
| 2. Flask | 5. Tripod (stand) | 8. Water |
| 3. Wire gauze | 6. Gas jar | |