

- 1.a. Spirit lamp is used to heat up substances.
- (b) Test tube is used to conduct tests with small quantities of chemicals for heating and boiling purposes.
- (c) Conical flask to hold sufficient quantities of substance in the form of solution.
- (d) ~~Evaporation~~ Evaporating dish is used ~~to~~ for evaporating liquids.
- (e) Wire gauze is used to keep

glass apparatus (flask, beaker) or while heating is in progress. It is also used for uniform distribution of heat.

(f) Beaker is used for keeping of solution.

(g) Mortar and pestle used to grind and crush solid substances into a powder.

(h) Measuring cylinder is used to measure the volume of (mainly) liquid substances.

i) Glass tube is used to transfer

(fluids or gases from one vessel to another)

j) ~~Glass tube is used to trans~~

~~fer~~ Glass Gas jar is used for collecting gases and holding them in captivity ~~vaccam~~ vaccam.

k) Reagent bottles is used for storing chemicals.

2-a) Test tube rack is made up of wood or plastic.

b) Test tube holder is made up of a iron clamp at front and wood or plastic handle

at other end.

c) Measuring cylinder is made up of glass.

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

e) Mortar and pestle is made of porcelain.

3.1. Five precaution 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~~ Do not work along in the laboratory.
4. Do not throw hot 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 before beginning an experiment

8. Do not throw broken glass apparatus used filter paper in the sink. Throw them in a dust bin

4.1 Chemistry is known as experimental science as an experiment 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 ~~trans~~ transparent material and we can see through it clearly.
3. It does not react with most of the chemicals used in experiment.
4. Glass withstands high temperatures.
5. Pyrex glass or borosil glass

is a special type of glass which hardly expands on heating. Such glasses do not break even at ~~high~~ high temperatures.



