

21/7/21
HW.

Exercise

- 1 a) Spirit lamp = It is used to heat up substances.
- b) Test tube = It 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) Evaporating dish = is used for evaporating liquid.
- e) Wire gauze = is used to keep glasses apparatus (flask, beaker) on while heating is in progress. It is also

used for ~~keep glass~~ uniform distribution of heat.

- f) Beaker = is used for keeping of solution.
 - g) **Mortar** and pestle = is used to grind and crush solid substance into a powder.
 - h) Measuring cylinder = is used ~~to~~ to measure the volume of mainly liquid substances.
 - i) Glass tube = is used to transfer fluids or gases from one vessel to another.
 - j) Gas jar = is used for collecting gases and holding them in captivity vacuum.
 - k) Reagent bottle 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 ~~to~~ front and wood or plastic handle at other end.
 - c) Measuring cylinder = is made up of ~~glass~~ 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. List any five precaution to be taken while performing an experiment in a chemistry laboratory

Ans) Do not touch or taste any unknown substance.

- > Use only small quantity of chemical to carry out experiment.
- > Do not work alone in the laboratory.
- > Do not throw hot concentrated acids into the sink directly.
- > Always wear an apron in the laboratory to protect your clothes.
- > The apparatus to be used in an experiment should be arranged neatly before beginning an experiment.
- > Do not throw broken glass apparatus or used filter paper in the sink. Throw them in a dustbin.

4.a) Why is chemistry known as an experimental science?

Chemistry is known as experimental science as an experiment is performed under controlled condition in an activity.

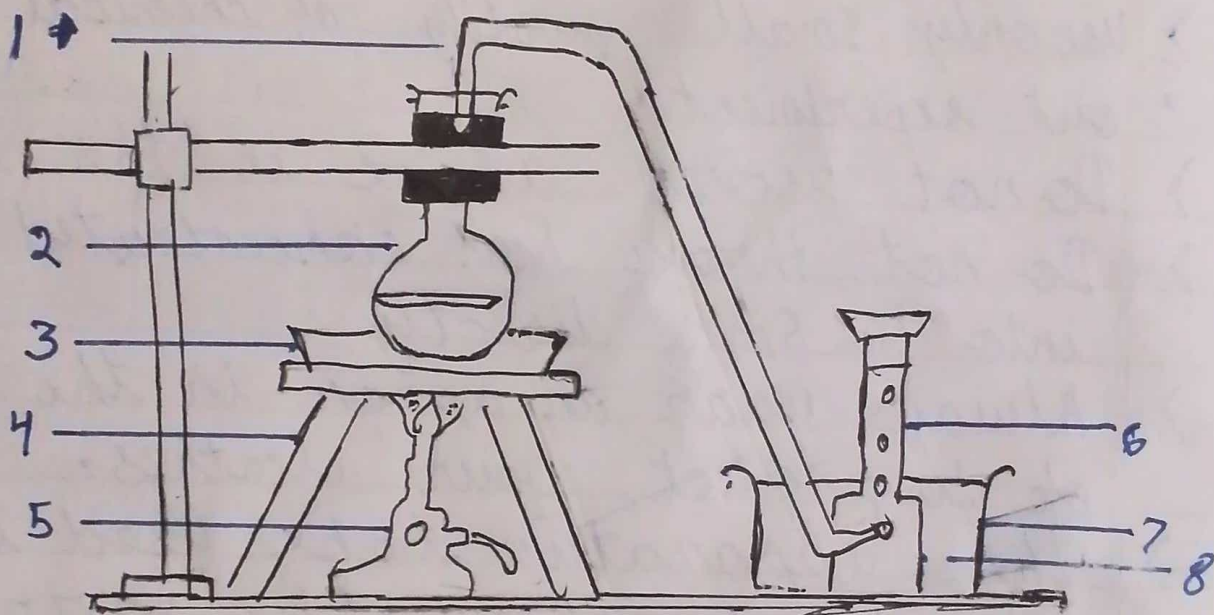
and we observe a natural or an artificially created phenomenon.

4.b. Why are most apparatus made of glass?

Ans. Most of the laboratory apparatus is made of glass because:

1. glass is easy to clean.
2. glass is 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 temperatures.
5. Pyrex or ~~borosil~~ borosil glass is a special type of glass which hardly expands on heating. Such glasses do not break even at high temperatures.

5. Label the marked equipments and apparatus in the diagram given below.



1. glass tube
2. F flask
3. Wire gauze
4. ~~Retort~~ stand
5. Burner
6. Gas jar
7. Water through
8. water