

29-6-2021

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Exercise

1. Mention one use of each of the following equipments:

- (a) Spirit lamp: It is used to heat up substances.
- (b) Test tube: It is used to conduct tests with chemicals for heating small quantities of ~~substance~~ ^{substance} in the form of solution and boiling purposes.
- (c) Conical flask: It holds the sufficient quantities of solutions during the experiment.
- (d) Evaporating dish: It is used for evaporating solutions/liquids.
- (e) Wire gauze: It is used to ~~tip~~ ^{keep} glass apparatus ^{on} it while heating.

- (f) Beaker: It is used to preparation and keeping of solutions.
 - (g) Mortar and pestle: It is used to grind or crush solid substances into powder.
 - (h) Measuring cylinder: It is used to measure the volume of liquid substances.
 - (i) Glass tube: It transfer fluids or gases from one vessel to another.
 - (j) Gas jar: It is used to collect gases.
 - (k) Reagent bottle: It is used for storing chemicals.
2. From what materials are the following made up of?
- (a) Test tube rack: wood or plastic
 - (b) Test tube holder: iron clamp at front wood or plastic
 - (c) Measuring cylinder: glass
 - (d) Wire gauze: iron wire and asbestos sheet
 - (e) Mortar and pestle: porcelain.

3. List any five precautions 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 sink directly.
 - Hot objects should be handled with attention and care.

4 Answer the following questions in brief:

(a) Why is chemistry known as an experimental science?

Ans 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) Why are most of the apparatus made of glass?

Ans Most of the laboratory apparatus is

made of glass because:

Glass is easy to clean.

Glass is transparent and we can see it clearly through

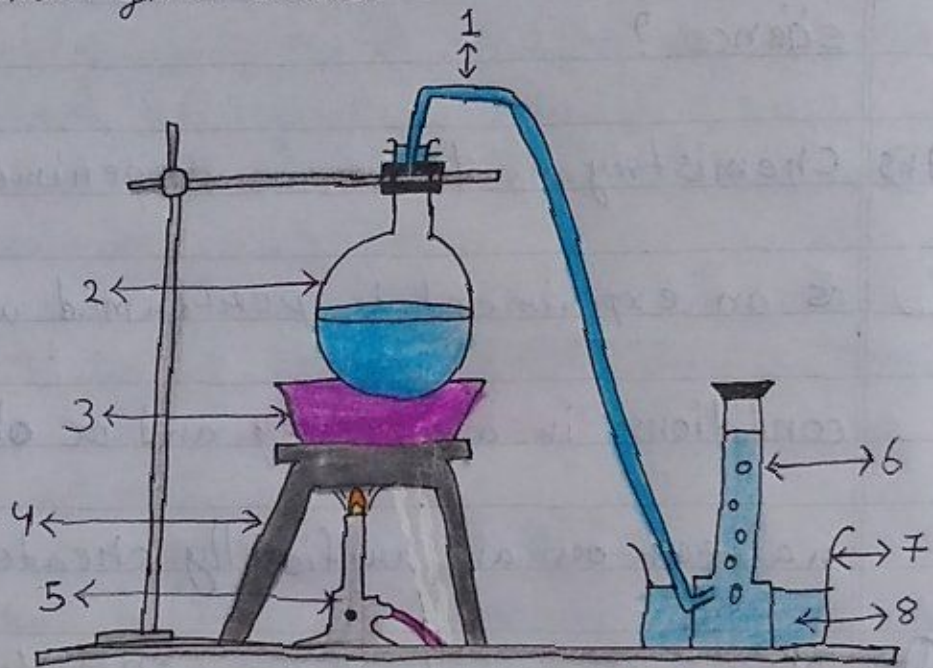
It does not react with most of the chemical

Glass withstands high temperatures

The apparatus made of glass is this glass is made of Pyrex or borosil glass. This glass does not break on high temp

temperatures.

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



- 1- Delivery tube
- 2- Flask
- 3- Wire Gauze
- 4- stand
- 5- Bunsen burner
- 6- Gas jar
- 7- water trough
- 8- water