

EXERCISE

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

- (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 solutions.
- (d) Evaporating Dish - Evaporating dish is used for evaporating liquids.
- (e) Wire Gauze - Wire gauze is used to keep glass apparatus, on while heating is in progress. It is also used for uniform distribution of heat.

- (f) Beaker - Beaker is used for ~~keeping~~ keeping of 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 volume of 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 vacuum.
- (k) Reagent bottle - Reagent bottle is used to store chemicals.

2. From what materials are the following made up of?

(a) Test Tube Rack -

→ Test Tube rack is made up of wood or plastic.

(b) Test Tube Holder -

→ Test Tube holder is made of ~~meshed~~ ~~iron wire~~ and a thin asbestos sheet that is fixed at its up of a iron clamp at front and wood or plastic handle at other end

(c) Measuring Cylinder -

→ Measuring cylinder is made of glass

(d) Wire Gauze -

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

(e) Mortar and Pestle -

Mortar and Pestle is made of porcelain.

3. List any five precautions taken care of while performing an experiment in a chemistry laboratory.

Five precautions taken care of while performing an experiment in chemistry lab are :

- → 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.

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 apparatus made of glass?

ans: Most of the laboratory apparatus is made of glass because:

→ Glass is easy to clean.

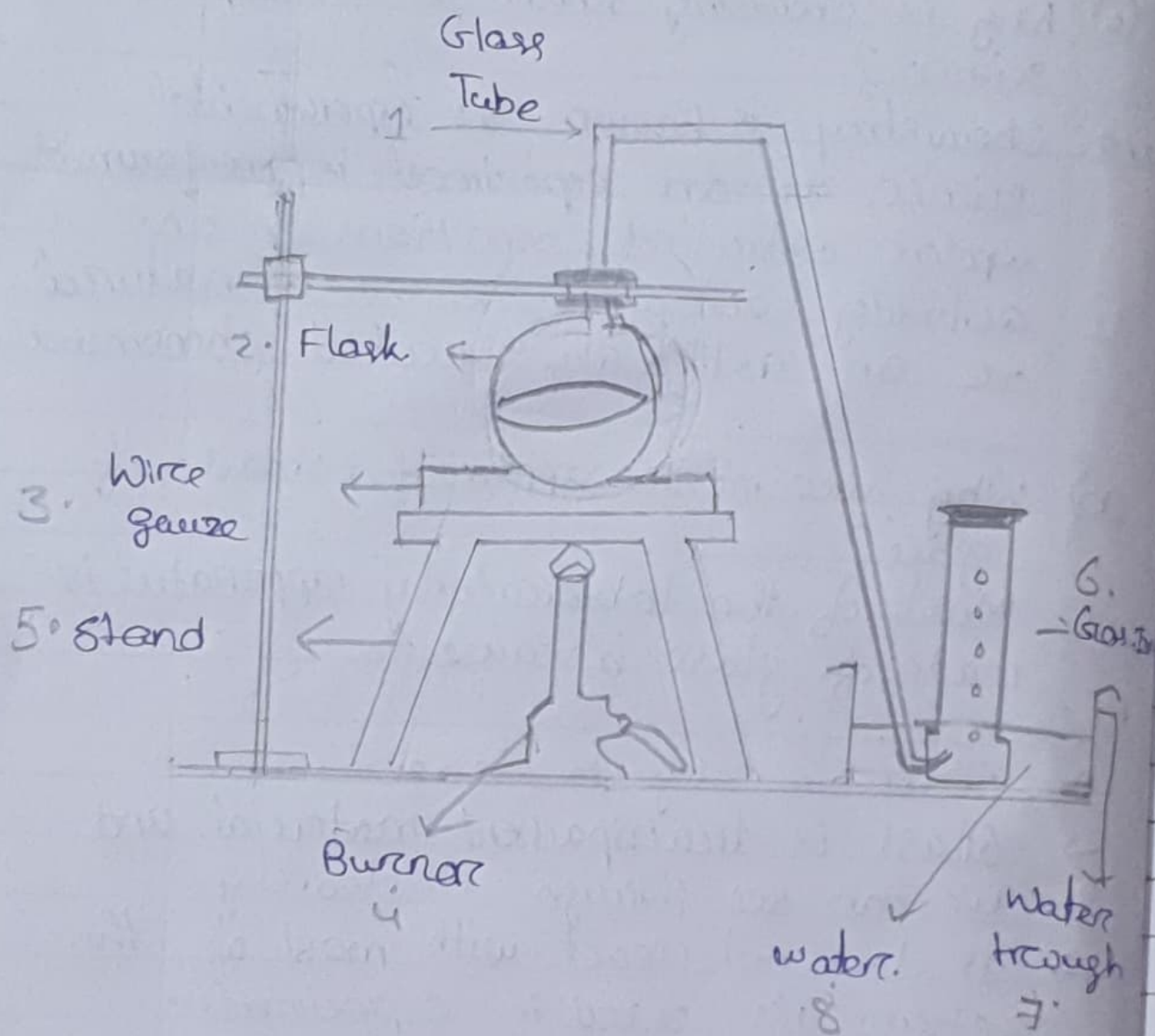
→ Glass is transparent material and we can see through it clearly.

→ It does not react with most of the chemicals used in experiments.

→ Glass withstands high temperatures.

→ Pyrex glass or borosil glass is a special type of glass which hardly expands on heating. Such glasses do not break even at high temperature.

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



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