HW 9/10/21

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Chemistry Worksheet

MCQs :-

1. Ans. (c) Iron.
2. Ans. (c) Black.
3. Ans. (b) distilled water.
4. Ans. (b) distillation.

Fill up the gaps :-

1. Element.
2. Element and Compounds.
3. Mixture.
4. Filtration.
5. Distillation.
6. Sublime.

Give one word for the following :-

1) residue.
2) distillate.
3) decantation.
4) _____ Fractional distillation.

Level-2 (Short Questions).

1) Ans. Matter is anything that has mass, occupies space and can be perceived by our senses.

2) Ans. Cooking of Food.

3) Ans. One of the undesirable change is floods.

4) Ans. While the candle is burning the wax is melting when

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is a physical change as wax can be again reversed back into a candle but when its combusting it is forming different gases so it is a chemical change.

5) The need of separating of mixture is to remove undesirable and harmful substances and getting pure and useful substances.

6) The process in which a solid changes directly into its vapours on heating is called sublimation.

7) Two practical applications of centrifugation are :-
* Cream is separated from milk by this method.
* Used in washing machines to squeeze out water from wet clothes.

8) The principle involved in magnetic separation is based on the generation of magnetic forces on the particles to be separated.

9) Distillation is more advantageous than evaporation as in distillation both components of the solid and liquid mixture are obtained whereas in evaporation only solid is obtained.

10) The need of separation of substances are :-
* To remove undesirable and harmful substances.
* Get useful substances.
* Get completely pure substances for preparing other useful substances.

11) The characteristic properties of a pure substance are :-
* They have a fixed boiling point, melting point, density etc.

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* They are all homogeneous; i.e, their composition is uniform throughout the bulk.

We need it for.
* Manufacturing medicines.
* To maintain the good health of humans.
* To prepare chemicals in industry etc.

12) Ans * We can remove the camphor from the mixture by the method of sublimation.
* On dissolving the leftover mixture, chalk dissolves in water and hence can be separated by the method of filtration.
* Finally by the method of evaporation the salt can be separated out.

Level (3) (Short Questions).

1. Ans. The process of separating different dissolved constituents of a mixture by their adsorption on an appropriate material is called chromatography.

Two advantages of chromatography are:
* A very small quantity of the substance can be separated.
* Components with very similar physical and chemical properties can be separated.

Two uses of chromatography are:
* It can be used to separate pigments from natural colours.
* It can be used in separating drugs from blood.

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2) * We can remove the camphor from the mixture by the method of sublimation.
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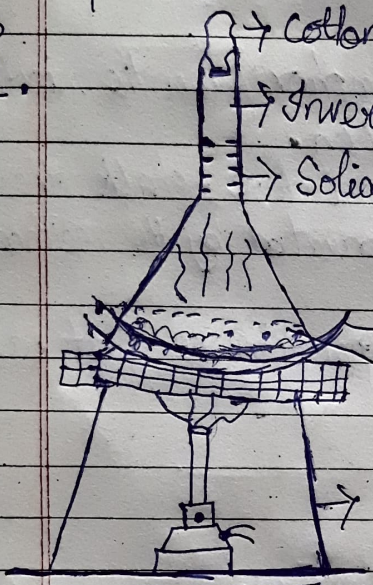
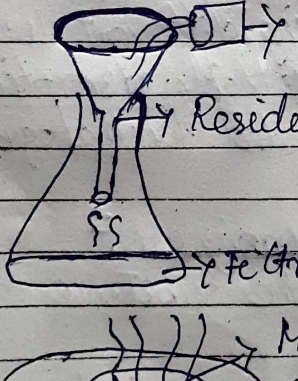
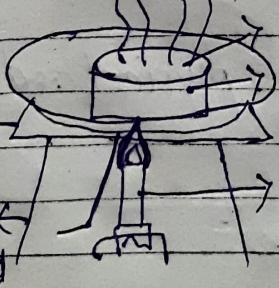
Step 1.



Step 2.



Step 3.



Ans. Evaporation :-

* Evaporation is a slow process.
* Evaporation takes place from the surface of the liquid.

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* Evaporation takes place at all temperatures below its boiling point.

Boiling :-

* Boiling is a fast process.
* Boiling takes place from all parts of the liquid.
* Boiling takes place at a fixed temperature on heating, i.e. at its boiling point.

4. Ans.

Atom	Molecule
* An atom is the smallest particle of an element which may or may not have independent existence.	* A molecule is the smallest particle of an element or a compound capable of independent existence, made up of one or more than one atom of same or different types.
* An atom represents all the properties of that element.	* A molecule represents all the properties of that element or compound.
* Ex :- Na and Cl	* Ex :- H_2O and CO_2, H_2 and O_2.