2. Floatation : The property of objects to float is floatation. Objects that float or sink depend on the materials they are made of and their shapes. For example, a piece of wood float on the water.

   Sink : If you drop an iron nail in water, it goes down to the bottom of vessel, it means it will sink.

3. A material which allows the heat energy to pass through are called conductor of heat. This property is called conductivity. For example, observe the cooking vessels in your kitchen. What kind of handless do they have? Why are the handles made of wood or plastic and not of metals?

   This is because wood or plastic does not allow heat to pass through them easily. So they do not become hot while cooking.

4. The materials which are attracted towards a magnet are called magnetic property of materials. This magnetic property is used in door of refrigerators, electronic items etc.

5 Chapter — Methods of Separation

A. Do yourself.

B. **1.** (d); **2.** (c); **3.** (d); **4.** (a)

C. **1.** Air; **2.** sand; **3.** flour; 4. water

D. **1.** False; **2.** True; **3.** True; **4.** False

E. **1.** chlorine; **2.** Liebig's condenser; **3.** purest; **4.** salt, evaporation

F. **1.**

Sedimentation	Decantation
It is the process in which heavier particles of an insoluble solid in a liquid settle down.	It is process of pouring out the liquid without disturbing the sediment particles that settle down.

2. (i) Gold; (ii) Silver; (iii) Copper; (iv) Water; (v) Common salt

3. The Process of separating the grains from the rest of the plant is called threshing.

4. (i) The constituents of a mixture may be in any ration.

   (ii) They retain their individual properties.

G. **1.** Filteration : The process of separating the insoluble and suspended solids of various sizes from a liquid, using a filter is called filteration.

   Now-a-days, a method of cleaning water for drinking which is gaining more popularity today, is RO technology.

2. Evaporation : The process of converting a liquid into its vapour, by heating it below the boiling point of the liquid is called evaporation.

   Sea water contains large amount of common salt the sea shore the sea water is collected in shallow pits are allowed to evaporate in sunshine. In a few days, the whole water evaporates, leaving behind impure salt.

3. We use filter paper to remove the insoluble solids of variouis sizes from a liquids. The filter paper has size of the holes depends upon the size of particles.

4. (a) A cup of tea contains water, sugar, milk and juices of tea leaves.

   (b) Air is a mixture of oxygen, nitrogen, carbon dioxide and water vapour.

   (c) Rock salt is a mixture of common salt and fine sand.

6 Chapter — Changes Around Us

A. Do yourself.

B. **1.** (d); **2.** (d); **3.** (a); **4.** (a)

C. **1.** bursting of balloon; **2.** burning; **3.** melting of ice

D. **1.** physical; **2.** chemical; **3.** effect **4.** heating

E. **1.** (i) Burning of paper : When a piece of paper is burnt, gases like water vapour and carbon dioxide are given out.

   (ii) Growth in plants and animals : The food that we eat is absorbed by the body and used to nourish cells for growth.

2. (i) It is temporary change.

   (ii) It is an reversible change.

3. A change that can be reversed is called reversible change. For example – the shape of rubber ball comes back to original shape when you stop squeezing it.

4. (i) A baby grows into an adult in over 18 years.

   (ii) The changes of seasons from summer to winter takes 6 months.

F. **1.** Fast changes : Some changes are very fast. These changes occur within seconds or minutes. For example : a boy blowing a balloon, bursting of balloon, burning of matchstick etc., are the examples of fast changes.

   Irreversible changes : Changes that cannot be reversed to its original position is called irreversible changes. Like milk change into curd, iron changes to rust, burning of paper etc.

2. Changes caused by heating :

   (a) Change in temperature : When we heat water using a gas stove, then the temperature of water rises and it becomes hot.

   (b) Expansion of materials : Heating can change water into steam. Thus, heating a material can change its state. Mercury expands a lot on heating. This property of mercury is used in making thermometers.