

### Additional Important Questions

1. Salt solutions, sugar solution, cold drinks, lime juice etc.
2. The grouping of various objects can be done the basis of following characters:  
(i) Size, (ii) shape, (iii) colour, (iv) hardness,  
(v) solubility in water, (vi) attraction towards magnet, (vii) conduction of heat,  
(viii) transparency, etc.
3. The grouping of objects in proper way make it easier to work. When we go to purchase some thing, the shopkeeper locates it easily, because there are separate shelves to put various items and similar things are kept at one place. If he randomly places all of these, he would never be able to find it so quickly and easily.
4. Cloth (of cotton, jute, nylon, etc.) plastic, metal or alloy.
5. (i) Mercury is liquid at room temperature.  
(ii) It is a good conductor of heat.  
(iii) Mercury has luster, so, it is easy to read the temperature.
6. Grouping the things help us to arrange them in systematic manner. The things when grouped are easy to handle. When grouped, it is easy to know the properties of object clearly. It also makes easy to compare two objects.
7. (i) Shoes: Leather, rubber, plastic, canvas  
(ii) Chair: Wood, metal, plastic, concrete  
(iii) Coins: Copper, silver, gold  
(iv) Utensils: Iron, copper, aluminium  
(v) Clothes: Cotton, wool, silk, rayon, nylon

### Properties of Materials

1. Opaque materials: (i) Wood, (ii) Iron, (iii) Cardboard, (iv) Brick, (v) Gold.  
Transparent materials: Water, (ii) Glass, (iii) Air, (iv) Cellophine plastic, (v) Fibre glass.
2. Water, Hydrochloric acid, Alcohol, Acetone, Petrol, Spirit, etc.
3. The property of water to dissolve large number of materials makes it universal solvent.
4. Edible oils, kerosene oil and petrol.
5. Water soluble substances: Salt, sugar, chilli powder.  
Water insoluble substances: Sand, paint, desi ghee, blotting paper.
6. (i) Beaker, (ii) Test tube, (iii) Conical flask, (iv) Crokery,  
(v) Glass doors, (vi) Glass jug.
7. Books, Black board, Cardboard, Wall, Wooden furniture, etc.
8. Milk, glycerine and soft drinks.
9. Water on cooling, freezes to form ice which is not transparent.
10. Take six test tubes, fill each of them about half with water. Keep each of them in a test tube stand. Add a pinch of each of six substances in separate test tubes. Shake well idofldine, chalk powder and sand do not dissolve.

11. This is because we generally use a tumbler to keep a liquid. A tumbler made of a piece of cloth cannot be used to keep water. So, a tumbler is made a material which has a property to hold the liquid.
12. Take a white sheet of paper, one sketch pen, one clean beaker and a small quantity of clean water. Now on white sheet mark a symbol (say 'X'). Now put the empty beaker over the marked symbol. We can see it properly. Now put water in the beaker. Observe the same mark. The mark is again visible. This observation proves that water is transparent.

