



## Is matter around us pure?

1. Calculate the masses of cane sugar and water required to prepare 200gm of 15 mass by mass solution of cane sugar in water.
2. Calculate the percentage composition in terms of mass of a solution obtained by mixing 300 gm of 25 and 400 gm of a 40
3. Justify hydrochloric acid is a compound
4. Compare give between alloy and metalloid with examples
5. Write down the properties of mixtures
6. Why air is considered as homogeneous?
7. Give two examples of colloid with phases
8. How can you identify that a given liquid is water?
9. How can you make unsaturated solution from saturated solution?
10. Why the cooking time on the hills is more than the planes?
11. Identify the following as element, compound and mixture  
CO, Co, salt, brine, fog, vinegar, iron fillings, alcohol
12. 30 gm of salt is dissolved in 350 gm salt water. Find the mass by mass percentage
13. Give example a) element + element=  
b) compound + compound =  
c) element + compound =
14. what is the relation between temperature and solubility?
15. differentiate between sol and gel