**COSTAATT**

**CHEM 090**

**Lesson 8 – Homework**

1. How does the particle size of:

(a) a solution compare with that of a suspension?

(b) a suspension compare with that of a colloid?

2. Which of a solution, suspension and colloid:

(a) does not transmit light?

(b) can be separated by filtration?

(c) will not settle out after standing?

3. This question is about solubility.

(a) Define solubility

(b) What effect does temperature have on the solubility of solids in liquids?

(c) What is the unit used for measuring solublity?

(d) (i) Use the data below to plot the solubility curve for sodium chloride.

|  |  |
| --- | --- |
| Temperature (0C) | Solubility of sodium chloride (g/100g of water) |
| 0 | 5 |
| 20 | 15 |
| 40 | 29 |
| 60 | 45 |
| 80 | 72 |
| 100 | 93 |

(ii) What is the solubility of sodium chloride at 500C?

(iii) What is the effect of temperature on the solubility of sodium chloride?