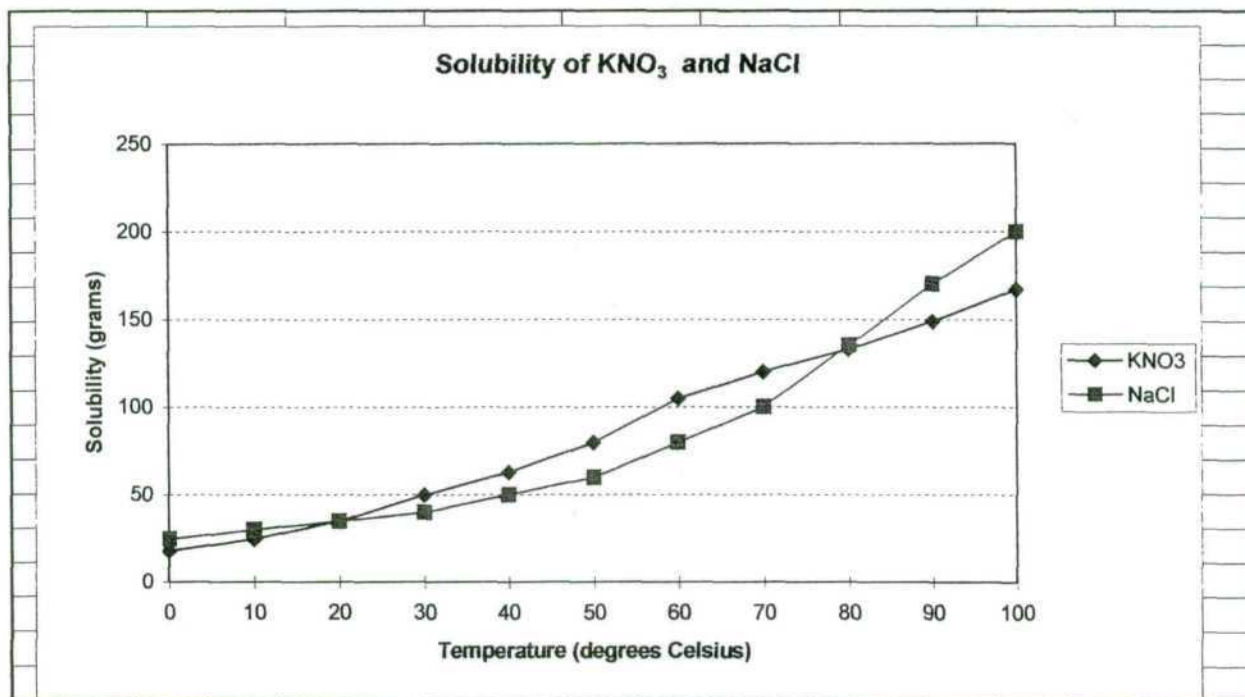
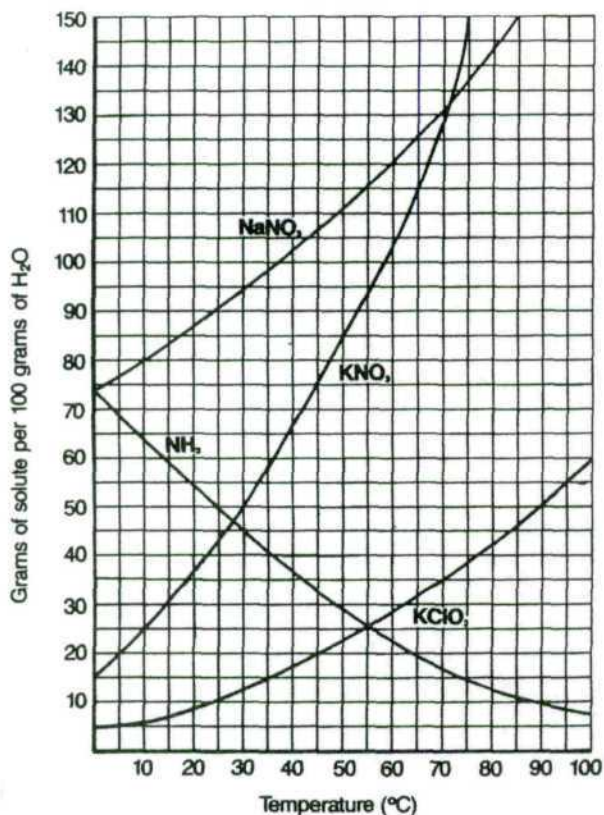


Physical Science
Mixtures
Worksheet 1: Solubility Curves of KNO₃ and NaCl



1. Is there more KNO₃ or NaCl dissolved at 5 ° C?
2. Is there more KNO₃ or NaCl dissolved at 55 ° C?
3. How many grams of NaCl are dissolved at 40 °C?
4. How many grams of NaCl are dissolved at 90 °C?
5. At what temperature could you dissolve 70 g of KNO₃ ?
6. At what temperature could you dissolve 70 g of NaCl?
7. What happens to the solubility of both NaCl and KNO₃ as the temperature increases?
8. To make an UNSATURATED solution, what's the most NaCl you could put in at 10 °C?
9. To make an UNSATURATED solution, what's the most NaCl you could put in at 40 °C?
10. To make a SATURATED solution, what's the least KNO₃ you could put in at 70 °C?

**Integrated Physics and Chemistry
Solutions
Worksheet 2: Solubility Curves**



1. Which substance does not appear to increase greatly in solubility as the temperature is increased?
2. Which substance **DECREASES** in solubility as the temperature is **INCREASED**?
3. Which substance **INCREASES** most in solubility as the temperature is **INCREASED**?
4. Which substance is most soluble at 15 °C?
5. Which substance is least soluble at 65 °C?
6. At 30°C, how much NaNO₃ will dissolve?
7. How much KClO₃ will dissolve at 55°C?
8. How much KNO₃ will dissolve into at 35 °C?
9. Which two substances have the same solubility at 55 °C?

10. What is the most KNO₃ that can be dissolved at 70 °C?
11. What is the most KClO₃ that can be dissolved at 60 °C?
12. Can 100 ml of water hold more KClO₃ or KNO₃ at 70 °C?
13. At 50°C, can 100 ml of water hold more NH₃ or KClO₃?
14. At what temperature would you need 100 ml of water to dissolve 50 g of NH₃?
15. At what temperature would you need 100 ml of water to dissolve 70 g of NH₃?
16. At what temperature would you need 100 ml of water to dissolve 70 g of KNO₃?
17. Would you be able to dissolve 70 g of KClO₃ into 100 ml of water at 60°C?
18. Would you be able to dissolve (all / some / none) of 40 g of NH₃ into 100 ml of water at 55°C?
19. Would you be able to dissolve (all / some / none) of 90 g of KClO₃ into 100 ml of water at 80°C?
20. Would you be able to dissolve (all / some / none) of 20 g of KNO₃ into 100 ml of water at 50°C?