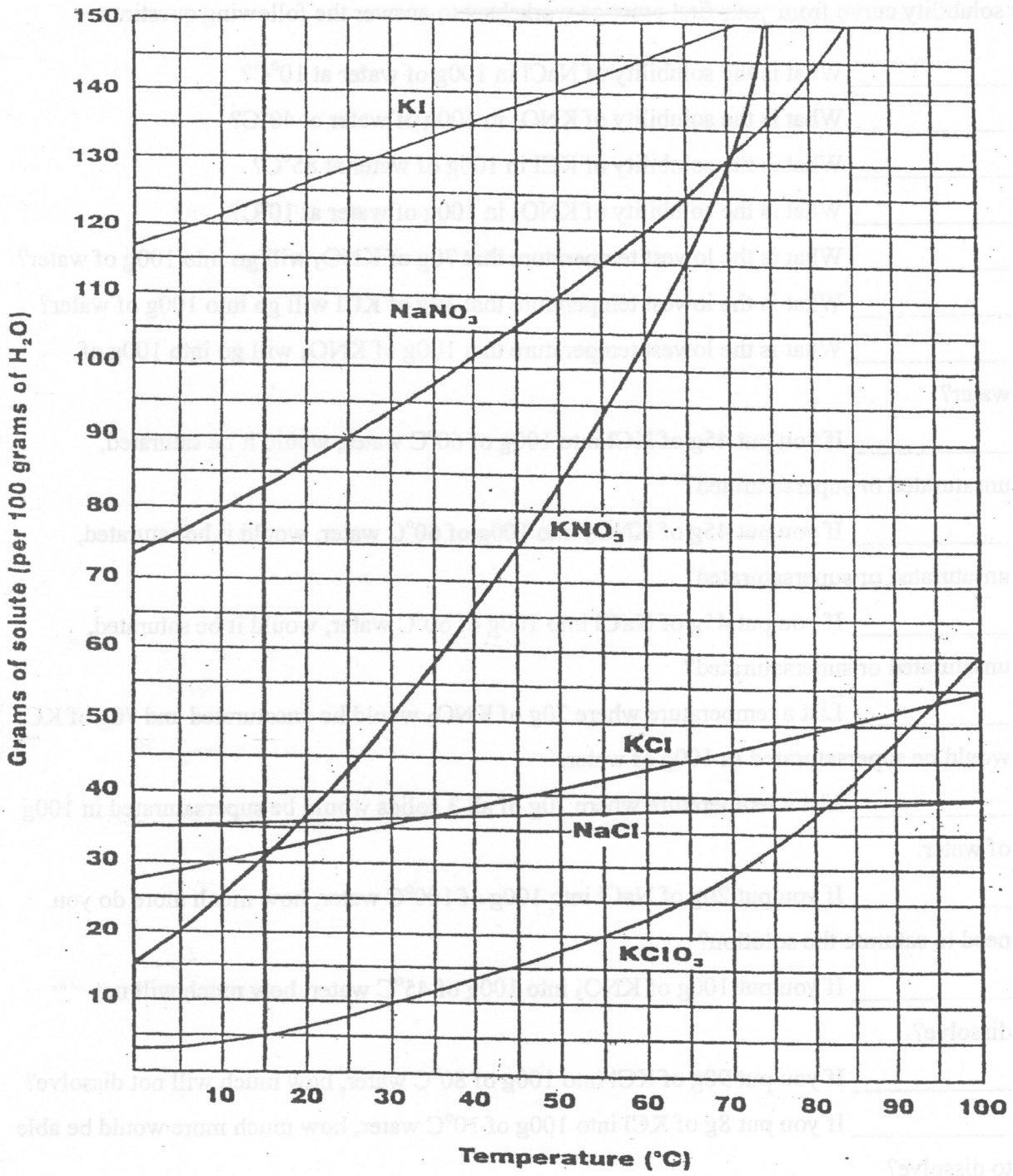


Solubility Curves



More Solubility Curve Reading Practice Name _____

Date _____ period _____

Use the solubility curve from ^{the 1st PAGE} your first practice worksheet to answer the following questions:

1. _____ What is the solubility of NaCl in 100g of water at 10°C?
2. _____ What is the solubility of KNO₃ in 100g of water at 40°C?
3. _____ What is the solubility of KCl in 100g of water at 85°C?
4. _____ What is the solubility of KNO₃ in 100g of water at 10°C?
5. _____ What is the lowest temperature that 70g of KNO₃ will go into 100g of water?
6. _____ What is the lowest temperature that 30g of KCl will go into 100g of water?
7. _____ What is the lowest temperature that 100g of KNO₃ will go into 100g of water?
8. _____ If you put 45g of KCl into 100g of 60°C water, would it be saturated, unsaturated or supersaturated?
9. _____ If you put 45g of KNO₃ into 100g of 60°C water, would it be saturated, unsaturated or supersaturated?
10. _____ If you put 45g of NaCl into 100g of 60°C water, would it be saturated, unsaturated or supersaturated?
11. _____ List a temperature where 70g of KNO₃ would be unsaturated and 70g of KCl would be supersaturated in 100g of water.
12. _____ List a temperature where 70g of all 3 solids would be supersaturated in 100g of water.
13. _____ If you put 20g of NaCl into 100g of 100°C water, how much more do you need to saturate the solution?
14. _____ If you put 100g of KNO₃ into 100g of 45°C water, how much will not dissolve?
15. _____ If you put 90g of KCl into 100g of 80°C water, how much will not dissolve?
16. _____ If you put 8g of KCl into 100g of 10°C water, how much more would be able to dissolve?
17. _____ How much KNO₃ will dissolve in 200g of 40°C water?
18. _____ How much NaCl will dissolve in 50g of 60°C water?
19. _____ How much KCl will dissolve in 50g of 75°C water?
20. _____ How much KCl will dissolve in 200g of 75°C water?

More Solubility Curve Reading Practice

Name KEY

Date _____ period _____

Use the solubility curve from your first practice worksheet to answer the following questions:

- $\approx 35 \text{ g}/100 \text{ cm}^3$ What is the solubility of NaCl in 100g of water at 10°C?
- $\approx 67 \text{ g}/100 \text{ cm}^3$ What is the solubility of KNO₃ in 100g of water at 40°C?
- $\approx 51 \text{ g}/100 \text{ cm}^3$ What is the solubility of KCl in 100g of water at 85°C?
- $\approx 26 \text{ g}/100 \text{ cm}^3$ What is the solubility of KNO₃ in 100g of water at 10°C?
- $\approx 42.5^\circ \text{C}$ What is the lowest temperature that 70g of KNO₃ will go into 100g of water?
- 10°C What is the lowest temperature that 30g of KCl will go into 100g of water?
- $\approx 58^\circ \text{C}$ What is the lowest temperature that 100g of KNO₃ will go into 100g of water?
- SUPERSAT. \rightarrow *above curve for KCl* If you put 45g of **KCl** into 100g of 60°C water, would it be saturated, unsaturated or supersaturated?
- UNSAT. \rightarrow *below KNO₃ curve* If you put 45g of **KNO₃** into 100g of 60°C water, would it be saturated, unsaturated or supersaturated?
- SUPERSAT. \rightarrow *above NaCl curve* If you put 45g of **NaCl** into 100g of 60°C water, would it be saturated, unsaturated or supersaturated?
- ANY TEMP. FROM 40°-100°C List a temperature where 70g of KNO₃ would be unsaturated and 70g of KCl would be supersaturated in 100g of water.
 ← BELOW LINE *← ABOVE LINE*
- SKIP List a temperature where 70g of all 3 solids would be supersaturated in 100g of water.
- 20g If you put 20g of NaCl into 100g of 100°C water, how much more do you need to saturate the solution? *(@ 100°C, SATURATED = 40 grams)*
- 25g If you put 100g of KNO₃ into 100g of 45°C water, how much will not dissolve? *↑ @ 45°C, SATURATED = 75g*
- $\approx 41 \text{ g}$ If you put 90g of KCl into 100g of 80°C water, how much will not dissolve? *← @ 80°C, SAT. ≈ 49 grams*
- $\approx 22 \text{ g}$ If you put 8g of KCl into 100g of 10°C water, how much more would be able to dissolve? *↑ @ 10°C, SAT $\approx 30 \text{ g}$*
- $\approx 132 \text{ g}$ How much KNO₃ will dissolve in **200g** of 40°C water? *(SAT. = 66g/100g OF H₂O)*
- $\approx 19.5 \text{ g}$ How much NaCl will dissolve in **50g** of 60°C water? *(SAT $\approx 39 \text{ g}/100 \text{ g OF H}_2\text{O}$)*
- $\approx 23.5 \text{ g}$ How much KCl will dissolve in **50g** of 75°C water? *(SAT $\approx 47 \text{ g}/100 \text{ g OF H}_2\text{O}$)*
- $\approx 94 \text{ g}$ How much KCl will dissolve in **200g** of 75°C water? *(" ")*