

Name _____

Solubility Curves

- 1) What is the solubility of KBr in 100g of water at 50°C?

82g

- 2) What is the minimum temperature needed to dissolve 180g of potassium nitrate in 100g of water?

85°C

- 3) Which substance shows the smallest solubility change with a change in temperature?

NaCl

- 4) Which substance has the least solubility at 0°C? Which one has the most?

KNO₃, NaClO₃

- 5) At what temperature do potassium nitrate and sodium chloride have the same solubility?

26°C

- 6) At 20°C, is a 50g potassium bromide solution saturated or unsaturated in 100g of water?

unsaturated

- 7) At what temperature does NaClO₃ have the solubility of 180g/100gH₂O?

73°C

- 8) If 110g of potassium bromide is mixed with 100g of water at 10°C, how much will not dissolve?

45g

- 9) How much potassium nitrate is needed to saturate 100 grams of water at 80°C?

168g

- 10) If a solution is made of 10g of potassium nitrate at 40°C, how much KNO₃ must be added to make a saturated solution in 100g of water?

52g

- 11) 100g of water at 90°C is saturated with potassium bromide. If this solution is cooled to 30°C, how much of the solid will precipitate?

25g

- 12) Place an "X" on the graph and explain its position for something that is supersaturated.

- 13) At 20°C, 100g of NaClO₃ will dissolve in 100g of water. How much NaClO₃ will dissolve in 420g of water?

420g

- 14) How much potassium nitrate will dissolve in 50g of water at 95°C?

110g

- 15) How much potassium bromide will dissolve in 10g of water at 10°C?

6.5g

- 16) How much more potassium nitrate will dissolve in 200g of water at 60°C than at 30°C?

120g

