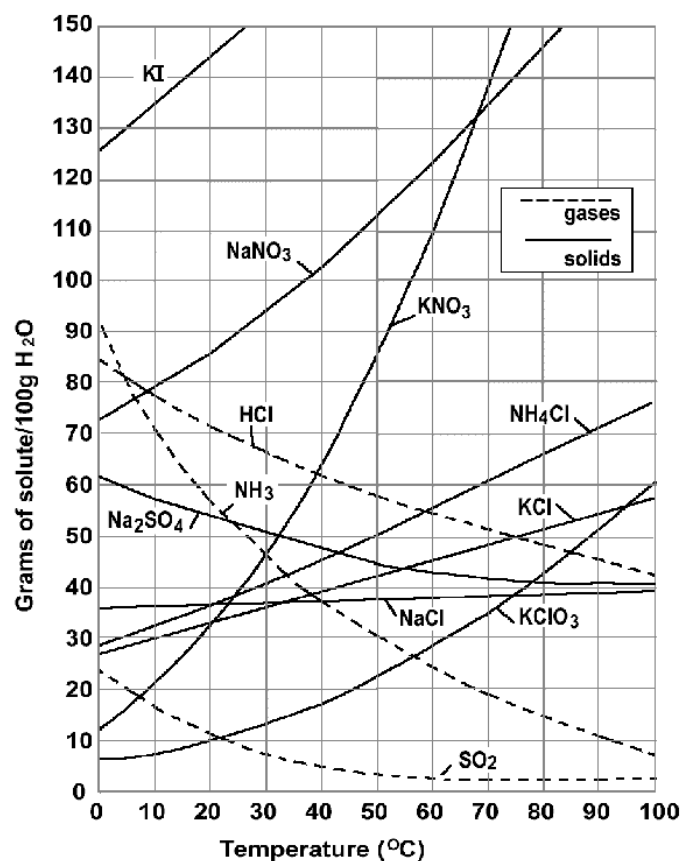


Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Solubility Curve Practice Problems**

**Directions:** Use the graph to answer the questions below. If the question requires a calculation, **SHOW ALL WORK TO RECEIVE CREDIT FOR THE ANSWER!**

- What is the solubility of potassium chloride at 10°C?
- What is the solubility of potassium chloride at 80°C?
- Is potassium chloride a solid or a gas? \_\_\_\_\_  
What happens to the solubility of solids as temperature increases?
- What is the solubility of NH<sub>3</sub> at 10°C?
- What is the solubility of NH<sub>3</sub> at 50°C?
- Is ammonia a solid or gas? \_\_\_\_\_ What happens to the solubility of gases as temperature increases?
- What is the mass of potassium chlorate that will dissolve in 50 g of water at 20°C?
- What is the mass of sodium sulfate that will dissolve in 250 g of water at 30°C?
- At 90°C, 10 g of potassium chlorate is dissolved in 100 g of water. Is this solution saturated, unsaturated, or supersaturated?
- A saturated solution of potassium chlorate is dissolved in 100 g of water. If the saturated solution is cooled from 90°C to 60°C, how many grams of precipitate will be formed?
- Which substance below is **least** soluble at 10°C?
- Which substance below shows the **least** change in solubility from 0°C to 100°C?
- A saturated solution of sodium nitrate is dissolved in 100 g of water. If the saturated solution is cooled from 40°C to 20°C, how many grams of precipitate will be formed?