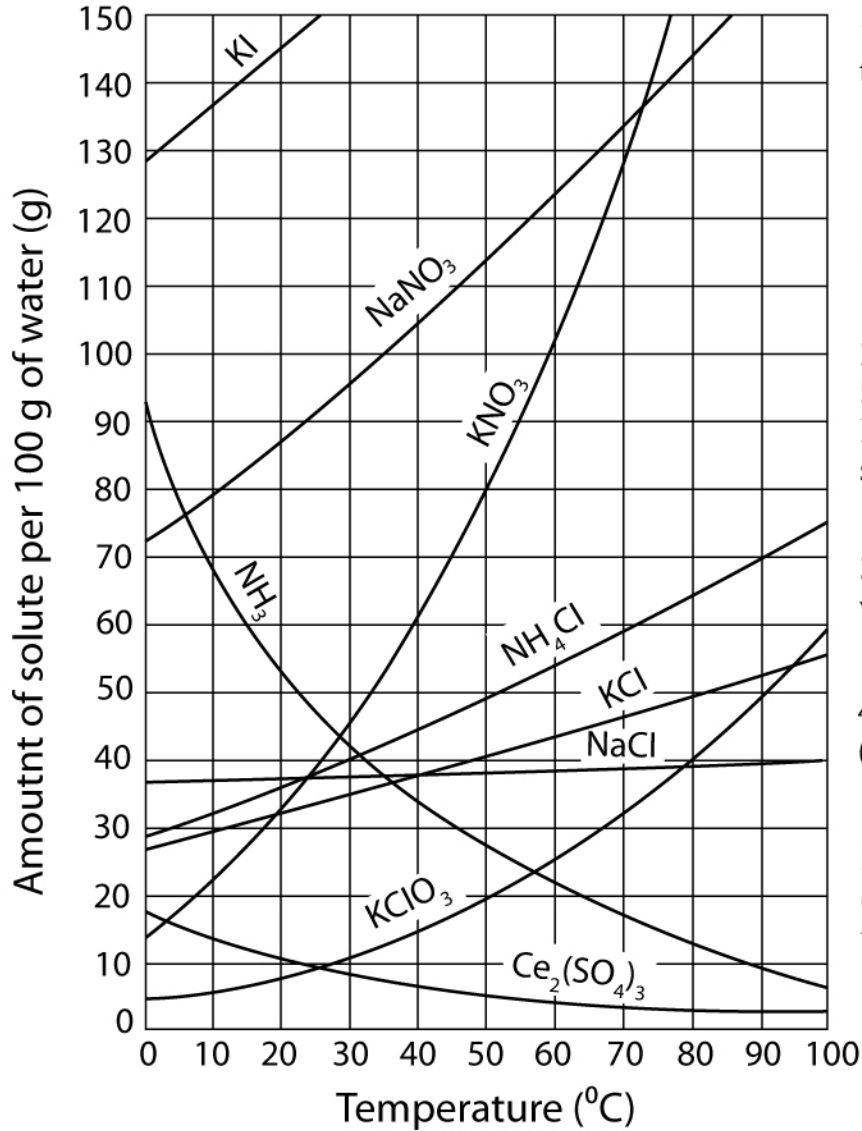


Name : _____ Date : _____

Score: _____

Solubility Curve Worksheet



1. 89 g NaNO₃ is prepared at 30°C. the given questions.

i. Will all of the salt dissolve? _____

ii. How much NaNO₃ is required to dissolve at this temperature? _____

2. If 50 grams of NH₄Cl is dissolved at 50°C, how many additional grams NH₄Cl would be needed to make the solution saturated at 80°C? _____

3. At 50°C, how many grams of KNO₃ will dissolve? _____

4. At 70°C, how many grams of cerium (III) sulfate (Ce₂(SO₄)₃) dissolve? _____

5. What do all of the compounds that decreased in solubility over the temperature range in the graph have in common? _____

6. What compound is least soluble at 40 °C? _____

7. What ionic compound is least soluble at 40 °C? _____

8. Determine if the following is unsaturated, saturated, or supersaturated.

i. 55 g of NH₃ at 20°C _____

ii. 78 g of NaNO₃ at 10°C _____

iii. 10 g of Ce₂(SO₄)₃ at 10°C _____

iv. 145 g of NaNO₃ at 80°C _____

v. 110 g of KNO₃ at 60°C _____

vi. 35g of NaCl at 100°C _____

vii. 65g of NH₄Cl at 80°C _____

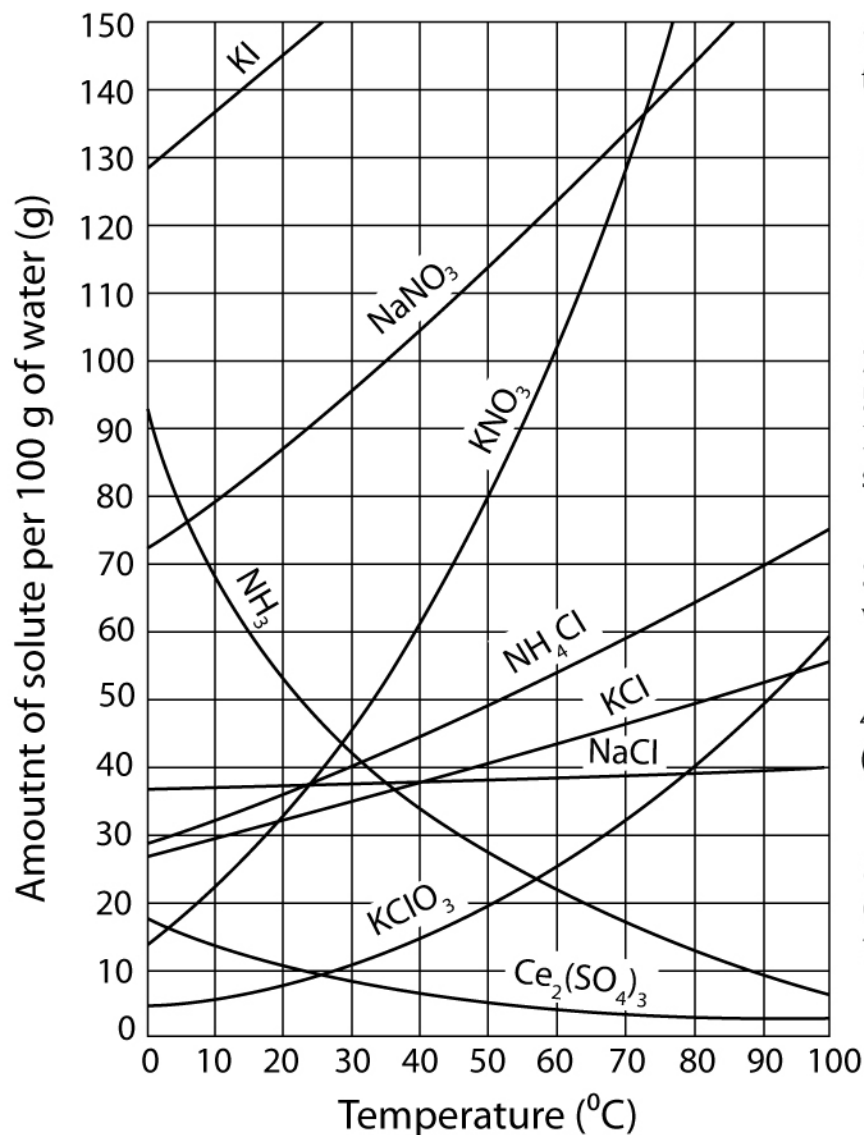
viii. 12g of NH₃ at 90°C _____

Name : _____ Date : _____

Score: _____

Solubility Curve Worksheet

Answers



1. 89 g NaNO₃ is prepared at 30°C. the given questions.

i. Will all of the salt dissolve? No

ii. How much NaNO₃ is required to dissolve at this temperature? 95g

2. If 50 grams of NH₄Cl is dissolved at 50°C, how many additional grams NH₄Cl would be needed to make the solution saturated at 80°C? 15g

3. At 50°C, how many grams of KNO₃ will dissolve? 80g

4. At 70°C, how many grams of cerium (III) sulfate (Ce₂(SO₄)₃) dissolve? 5g

5. What do all of the compounds that decreased in solubility over the temperature range in the graph have in common? They are all gases

6. What compound is least soluble at 40 °C? Ce₂(SO₄)₃

7. What ionic compound is least soluble at 40 °C? KClO₃

8. Determine if the following is unsaturated, saturated, or supersaturated.

i. 55 g of NH₃ at 20°C supersaturated

ii. 78 g of NaNO₃ at 10°C saturated

iii. 10 g of Ce₂(SO₄)₃ at 10°C unsaturated

iv. 145 g of NaNO₃ at 80°C saturated

v. 110 g of KNO₃ at 60°C supersaturated

vi. 35g of NaCl at 100°C unsaturated

vii. 65g of NH₄Cl at 80°C saturated

viii. 12g of NH₃ at 90°C supersaturated