**Solubility Curves**

Name(s):

Date:

Lab Section:

**DATA**

1. Copy and paste your *Excel* spreadsheet into the embedded table below.



1. Copy and paste your solubility graph into the space below.

3. What were the equation and R-squared value for your linear trendline? For your second order polynomial trendline?

4. What was your unknown number? What was the concentration of your unknown?

**QUESTIONS**

1. Using your graph, tell if each of these homogeneous solutions would be unsaturated, saturated, or supersaturated.

 A. 110 g of KNO3 in 100 g of H2O at 40 °C

 B. 60 g of KNO3 in 100 g of H2O at 70 °C

 C. 140 g of KNO3 in 200 g of H2O at 60 °C

2. According to your graph, will 50 g of KNO3 completely dissolve in 100 g of H2O at 50 °C? Explain.

3. Using your trendline equation, how many grams of KNO3 will dissolve in 100 g of H2O at 30 °C?

4. Compare your solubility graph to the literature. How close were the lines to each other? Explain any regions of error and site your literature source.