## Molarity

Name: $\qquad$

1) What is the molarity of a solution which contains 3.11 moles of KCl dissolved to a total volume of 1200. mL?
2) What is the molarity of a solution prepared by dissolving 78.2 g of ammonium chloride in water to a final volume of 0.100 liter?
3) How many moles of barium iodide would need to dissolve in 125 mL of water to make a 2.75 M solution?
4) How many grams of $\mathrm{CuSO}_{4} \cdot 5 \mathrm{H}_{2} \mathrm{O}$ would be dissolved in 750 mL of 1.25 M solution?
5) How many grams of rubidium hydroxide must be used to make 2.00 L of 0.150 M solution?
6) What volume (in mL ) of 1.250 M solution could be made from 80.75 grams of nickel (II) chloride?
7) How many grams of $\mathrm{CoCl}_{2} \bullet 3 \mathrm{H}_{2} \mathrm{O}$ will be needed to make 75.0 mL of 0.500 M solution?

Answers: 1) 2.59 M
4) 234 g
6) 498 mL

