## Molarity

Name: $\qquad$

1) What is the molarity of a solution which contains 2.65 moles of NaCl dissolved to a total volume of 600. mL?
2) What is the molarity of a solution prepared by dissolving 14.1 g of ammonia $\left(\mathrm{NH}_{3}\right)$ in water to a final volume of 0.100 liter?
3) How many moles of sodium fluoride would need to dissolve in 125 mL of water to make a 2.75 M solution?
4) How many grams of $\mathrm{FeCl}_{3} \bullet 6 \mathrm{H}_{2} \mathrm{O}$ would be dissolved in 750 . mL of 1.25 M solution?
5) How many grams of sodium hydroxide must be used to make 3.00 L of 0.450 M solution?
6) What volume (in mL ) of 0.250 M solution could be made from 8.75 grams of potassium chloride?
7) How many grams of $\mathrm{CuSO}_{4} \cdot 5 \mathrm{H}_{2}$ Owill be needed to make 75.0 mL of 0.500 M solution?

Answers: 1) 4.42 M
4) 253 g
6) 469 mL

## Molarity

Name: $\qquad$

1) What is the molarity of a solution which contains 2.65 grams of calcium fluoride dissolved to a total volume of 600. mL?
2) What is the molarity of a solution prepared by dissolving 14.1 g of oxygen difluoride in water to a final volume of 0.100 liter?
3) How many moles of magnesium iodide would need to dissolve in 125 mL of water to make a 2.75 M solution?
4) How many grams of $\mathrm{Ni}\left(\mathrm{NO}_{3}\right)_{2} \cdot 2 \mathrm{H}_{2} \mathrm{O}$ would be dissolved in $750 . \mathrm{mL}$ of 2.15 M solution?
5) How many grams of aluminum hydroxide must be used to make 4.00 L of 0.350 M solution?
6) What volume (in mL ) of 0.250 M solution could be made from 87.5 grams of potassium dichromate?
7) How many grams of $\mathrm{BaSO}_{4} \cdot 7 \mathrm{H}_{2} \mathrm{O}$ will be needed to make 75.0 mL of 0.500 M solution?

Answers: 2) 2.61 M
4) 352 g
6) 1190 mL

