

NAME _____

INSTRUCTIONS: Work each of the following problems in the space provided. Show all your work and circle your final answer.

1. What is the molarity of a 1000 ml solution containing 65.12 g of potassium cyanide?
2. What is the molarity of 500 ml of solution containing 41.98 g of sodium fluoride?
3. What is the molarity of 125 ml of solution containing 5.31 g sodium nitrate?
4. 12.47 g of ammonium nitrate are dissolved in water, then diluted to 250 ml. What is the molarity of the resulting solution?
5. 16.99 g of silver nitrate are dissolved in water, then diluted to 500 ml. What is the molarity of this solution?
6. How many grams of potassium chloride are required to make 1.00 L of a 2.00 M solution?
7. How many g of sodium dichromate are needed to make 500 ml of a 1.5 M solution?
8. How much calcium chloride would you need to make 400 ml of a 0.5 M solution?
9. If I started with 500 ml of 2.50 M solution and diluted it to 1500 ml, what would the resulting molarity be?
10. How many ml of 12.0 M sulfuric acid are required to make 1000 ml of a 0.1 M solution?