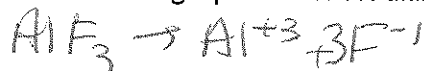


200g of aluminum fluoride is dissolved in 200mL of water. Answer the following questions.

- a. How many moles of aluminum fluoride are dissolved?

$$\frac{200 \text{ g}}{84 \text{ g/mol}} = 2.38 \text{ mol}$$

- b. What is the dissolving equation for the aluminum fluoride?



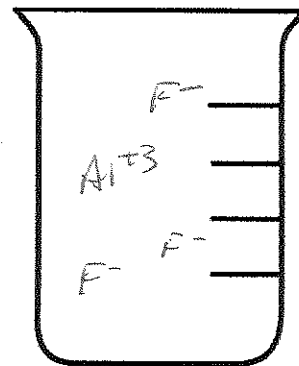
- c. What is the concentration in moles/Liter of aluminum fluoride?

$$\frac{2.38 \text{ mol}}{.20 \text{ L}} = 11.9 \text{ M}$$

- d. If an additional 100mL of water is added to the solution, what is the new concentration

$$\frac{2.38}{.3} = 7.93 \text{ M}$$

- e. Sketch the solution in the beaker to the right.



Preliminary Quiz Liquids
Version B

50mL of water is added to 25g of NaCl. Answer the following questions.

- a. How many moles of NaCl are dissolved?

- b. What is the dissolving equation for the NaCl?

- c. What is the concentration in moles/Liter?

- d. What is the concentration of the NaCl if an additional 30mL of water is added?

- e. Sketch the solution in the beaker to the right.

