WHAT YOU NEED TO KNOW FROM SECTION 9.1 (pages 275-277)

- What is reaction stoichiometry?

- What do ALL stoichiometry problems require to solve? What two things does it provide?

- What is meant by "given" and "unknown" when it comes to stoichiometry problems?

- List the 4 types of Stoichiometry problems and show using arrows, the general "plan" for solving each type of problem (**THIS WILL BE VERY USEFUL AND IMPORTANT**, **SO DO IT!!!)**

1.

2.

3.

4.

- What is a mole ratio and where do you find them?

- Explain how there are **two** possible mole ratios between any two substances involved in a chemical reaction instead of just one.

- Below is the example equation from the book. Use it to answer the questions below:

` $2Al_2O_3$ (l) → 4Al (s) + $3O_2$ (g)

  - What are the two possible mole ratios for Al_2O_3 and Al?

  - What are the two possible mole ratios for Al_2O_3 and O_2?

  - What are the two possible mole ratios for Al and O_2?

- How does this help us determine how many moles of Al would be produced if we started out with 13.0 moles of Al_2O_3?