

**Main Ideas, Key Points,
Questions:**

After watching the video segment, write down key points, main ideas and big questions.

Objective(s):

- *To complete stoichiometric calculations to determine mole ratios and mass to mass ratios in chemical reactions.*

Notes:

During the video segment, use words, phrases or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You can ask yourself: "If I was going to explain this to someone else, what would I say?"

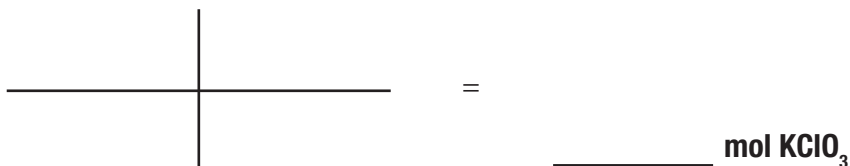
After watching the video and performing any associated labs and/or experiments, you should be able to answer the following:

Stoichiometry is the calculation of the quantities of reactants and products involved in a chemical reaction. Use the balanced equation of magnesium reacting with oxygen to form magnesium oxide to determine the mole ratios of magnesium and oxygen in this reaction.

1. How many moles of magnesium and oxygen are found on the reactant side of the equation?
2. How many moles of magnesium and oxygen are found on the product side of the equation?

Follow along with the video and write out the conversion chart to solve the following stoichiometry problem:

3. How many moles of KClO_3 must decompose in order to produce 9 moles of oxygen gas (O_2)?



4. What is meant by a “mass to mass” stoichiometry problem?
5. Show the conversion chart used to solve the following mass to mass stoichiometry problem: How many grams of silver will be formed from 12 grams of copper in the following reaction?

