

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

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

Objective(s):

- *To use dimensional analysis to solve problems using conversion factors.*

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:

1. Stoichiometry is the calculation of the quantities of reactants and products involved in a chemical reaction. Where did the word “stoichiometry” come from?
2. Write a simple equivalence statement using the word “dozen.”
3. When performing dimensional analysis, we usually use conversion factors. What is a conversion factor?

In Unit 6A, you will illustrate dimensional analysis using two examples in which we convert metric units to English units. Use the dimensional analysis steps listed in the Chemistry Matters Toolkit. In the space below, write in the dimensional analysis conversion charts used in Unit 6A.

4. “Your European hairdresser wants to cut your hair 8.0 cm shorter. How many inches will he be cutting off?”

$$\frac{\quad}{\quad} = \underline{\hspace{2cm}} \text{ inches}$$

5. “Your high school football team needs 550 cm for a first down. How many yards is this?”

$$\frac{\quad}{\quad} = \underline{\hspace{2cm}} \text{ yards}$$