

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

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

Objective(s):

- *To practice predicting the products of chemical reactions.*
- *To develop particle models to confirm the law of conservation of matter.*

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:

You are expected to carry out an investigation to produce an activity series of metals with metal ions. Below or on a separate sheet, show your data table from this investigation.

1. What kinds of reactions are predicted by an activity series?

You are expected to carry out an investigation to predict the products of double displacement reactions using three solutions and a solubility table.

After you complete the lab, analyze your data from this investigation and write balanced equations for these reactions:



Draw a particle model of the following reactions:



6. In a net ionic equation such as $\text{Pb}^{2+} + 2\text{I}^- \rightarrow \text{PbI}_{2(\text{s})}$, why do we not show the nitrate and potassium ions?

7. How does balancing a chemical equation demonstrate the Law of Conservation of Matter?