

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

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

Objective(s):

- *To explain the auto-ionization of water.*
- *To explain the logarithmic nature of the pH scale.*

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:

Make sure you have written a titration plan and carried out the titration before continuing with this video.

- 1. Based on the titration you have completed, what was the concentration of the solution in your procedure?**
- 2. What is the autoionization of water?**
- 3. Based on the Bronsted-Lowry model of an acid and a base, how do we define an acid?**
- 4. Based on the Arrhenius model of an acid and a base, how do we define an acid?**
- 5. The pH scale is a logarithmic scale. Therefore, a pH of 2 is how much more acidic than a pH of 3?**
- 6. The molarity of an acid is 0.05 molar. Use a calculator to calculate its pH.**