

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

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

**Objective(s):**

- *To analyze and explain data from experiments on reaction rates.*
- *To develop and use a model for the action of a catalyst in a chemical reaction.*
- *To use the Kinetic Molecular Theory to explain the characteristics of gas particles.*

**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:**

*Before viewing the Unit 9C video, you are expected to plan and carry out an investigation of factors that can change the reaction rate of the antacid tablet in water. Once your data table or graph is completed, continue Unit 9 by answering the Unit 9C questions below:*

- 1. Explain the results of your experiment based on the data you have collected.**
- 2. List three methods that can be chosen in this experiment to increase the rate of reaction.**
- 3. A catalyst is a substance that provides a lower energy pathway for reactants to convert to products without getting used up or changed itself. Does a catalyst raise or lower the activation energy needed to complete a chemical reaction?**
- 4. List two examples of catalysts.**
- 5. The Collision Theory can be extended to explain the behavior of gases in the Kinetic Molecular Theory. Gases possess a number of unusual properties. Gases exert pressure and they are compressible. Name one more property of gases related to expansion.**
- 6. Name a scientist who helped to develop the Kinetic Molecular Theory.**