

Pre-Visit/Post-Visit Guide

Lesson Name: Way Cool Science!

Summary of Lesson:

Students will get an up close and personal view of changes in states of matter, the concept that matter is made up of moving atoms, and that matter can undergo both physical and chemical changes. Students will distinguish between acids and bases using indicators and will witness the effects of extreme temperatures on different states of matter. The interactive nature of the presentation enhances the exciting experiments.

South Carolina Science Standard: 7.P.2B.4.

Pre-Visit Resources

- **Teacher/Chaperone Expectations:** Please help us by letting us know of any special accommodations for your children prior to the lesson. This 60 minute stage show has periodic loud noises, some fire demonstrations, and darkness. Your assistance with auditorium management is greatly appreciated.
- **Instructions for Teachers:** Students will enter from the back of the Symmes Hall of Science forming a single file line into the auditorium. The instructor will direct students beginning with the second row of the auditorium filling every seat. No food or drinks are allowed in the auditorium. Please have students spit out gum before entering. During demonstrations where the house lights have been lowered all visitors must remain seated until the lights have been brought back up.
- **Key Vocabulary:** physical change, chemical change, chemical reaction, sublimation, indicator
- **Key Questions Addressed in Lesson:** What is a physical change? What is a chemical change? What are some evidences of a chemical reaction?
- **Content Preview Video:** This is a video explaining physical and chemical changes and showing examples of each. <https://www.youtube.com/watch?v=4ZGULLWEy1c>

Post-Visit Resources

- **Writing Prompt:** Chemical changes affect matter. Before you begin writing, think about the experiments and activities you have done in class to learn about the different kinds of chemical changes that can occur in matter. Pretend you are an uncooked egg; now describe what happened to you when you were placed in a pot of boiling water.
- **Possible Lesson Link:** This site lists multiple chemistry lessons for use in the classroom. <http://www.middleschoolchemistry.com/lessonplans/chapter6/lesson1>
- **Video Link:** This is a quick, fun video explains how baking is a chemical change. https://www.youtube.com/watch?v=37pir0ej_SE