

National Science Education Standards

CHAPTER CHALLENGE

In order for students to be able to present a chemistry show, one must be sure that they understand the concepts that they are trying to present. In order to have the confidence needed to present a concept, the activities are designed to lead the students through the basics to a good understanding of each concept presented.

CHAPTER SUMMARY

To gain the necessary knowledge of the needed principles necessary to meet this challenge, students will work together on each activity and will decide which activities they will use in their presentation. These activities will engage the students in the following content identified in the National Science Education Standards listed below.

CONTENT STANDARDS

Unifying Concepts and Processes

- Systems, order, and organization.
- Evidence, models, and explanation.
- Change, constancy, and measurement.
- Form and function.

Science as Inquiry

- Identify questions and concepts that guide scientific investigations.
- Design and conduct scientific investigations.
- Understanding of the nature of science.
- Skills necessary to become independent inquirers about the natural world.
- The dispositions to use the skills, abilities, and attitudes associated with science.

Physical Science

- Structure and properties of matter.
- Chemical reactions.
- Interactions of energy and matter.

Science and Technology

- Communicate the problem, process, and solution.

History and Nature of Science

- Science as a human endeavor.
- Nature of scientific knowledge.