

Effective and Safe Classroom Activities

Online Resources



Conducting safe classroom demonstrations and activities is essential to successful elementary science education. The following resources provide Core Knowledge's recommendations for developing effective science classroom activities.

These resources, included at the back of the Teacher Guide on pages 63–67, consist of the following:

- Classroom Safety for Activities and Demonstrations
- Strategies for Acquiring Materials
- Advance Preparation for Activities and Demonstrations
- What to Do When Activities Don't Give Expected Results

These resources may also be accessed within the CKSci Online Resources Guide for this unit, available at

www.coreknowledge.org/cksci-online-resources

MATERIALS AND EQUIPMENT

The unit requires a large variety of materials to support various ways of learning (including doing, discussing, listening, watching, reading, and writing). Prepare in advance by collecting the materials and equipment needed for all the demonstrations and hands-on investigations.

- Roll paper, poster board, or a bulletin board should be dedicated at the beginning of the unit to serve as a question board to cumulatively document and return to student questions. The question board is referred to in the materials for lessons in which it is used but is not repeated in the materials listed here.
- Internet access and the means to project images/videos for whole-class viewing is also required in many lessons but is not repeated below.

Lesson 1 The Sensational Carnival!

- n/a

Lesson 2 Your Sense of Sight

- simple eye chart
- collection of safety glasses and other adaptive eye equipment, such as eyeglasses, bifocals, goggles, work glasses, binoculars, hand lenses, microscopes, and loupes

Lesson 3 Your Sense of Hearing

- collection of safety and other adaptive ear equipment, such as headphones, earbuds, earplugs, earmuffs and hearing aids

Lesson 4 Your Sense of Smell

- items in individual paper cups with opaque lids for students to smell: lemon, banana, mint, onion, vinegar, coffee, pine needles, garlic, rose petals, pencil shavings

Lesson 5 Your Sense of Taste

- finger foods in individual paper cups: tart gummy candy, salty cheese-flavored cracker, raisin, semisweet chocolate chip, cheese cube
- plastic spoons (1 per student)
- question board

Lesson 6 Your Sense of Touch

- collection of balls with different textures: tennis ball, table tennis ball, marble, rubber ball, golf ball, billiard ball, baseball
- short pieces of string

Lesson 7 Science in Action: A Visit to the Eye Doctor

- simple eye chart