

How to Use this Resource Guide and the Classroom Activities

This teachers' resource guide provides a series of hands-on, minds-on science activities for the K-8 classroom. The activity format has been teacher-tested. Care has been taken to provide content explanations for the teacher or interested gifted student who wants to explore further. In addition to rich science content, each lesson emphasizes the behaviors needed to reduce the risk of noise-induced hearing loss, as well as grade-level appropriate science process skills. Because teachers may choose to do only one activity, you will find some redundancy in the content and behavioral messages from one activity to the next. In Appendix E you will find a useful at-home activity, "How Loud is Too Loud," that provides a fun activity to send home with your students. You will find that all activities in this resource guide:

- are safe
- are affordable
- are practical and easy to use
- have been classroom tested
- are supported by rich content
- have been reviewed by K-8 teachers
- have been reviewed by science content specialists
- have been reviewed by hearing specialists
- were tested in primary, intermediate, and middle school classrooms
- have been aligned with national science standards
- are linked to the behavioral objectives of Dangerous Decibels

For your convenience the curriculum is organized into detailed, easy-to-follow sections described below with individual sections designated by **bold** text.

- **science topics** that are covered
- **science process skills** that are used
- **time required** for each stage of the activity:
 - advance preparation** for teacher (*does not include gathering supplies*),
 - set-up** before class,
 - doing the **activity** with students, and
 - clean-up** after the activity
- **materials** supplies list
- detailed step-by-step **activity** procedure instructions
- hints for **introducing the activity** in a manner that facilitates inquiry process, speculation, independent thinking and discovery
- hints to guide **class discussion** and encourage student analysis and conclusion building
- **explanations** of in-depth scientific content for teachers and interested students
- **optional extensions** and **cross curricular connections** to disciplines, such as math or music, for teachers who enjoy extending lessons and for those who integrate disciplines throughout their lessons
- **alignment with science content standards** is given on the website at www.dangerousdecibels.org
- **glossary** in Appendix A
- support materials in **Appendices** A through F