Dear Parent,

Your son's or daughter's science class will soon begin exploring the chapter entitled "The Properties of Matter." In this chapter, students will learn about the many different properties that objects can have, and why these properties are important. By the end of the chapter, students should demonstrate a clear understanding of the chapter's main ideas and be able to discuss the following topics:

- 1. the two properties of all matter (Section 1)
- 2. how volume and mass are measured (Section 1)
- 3. the difference between mass and weight (Section 1)
- 4. the relationship between mass and inertia (Section 1)
- 5. examples of matter's different properties (Section 2)
- 6. how density is used to identify different substances (Section 2)
- 7. physical properties as compared to chemical properties (Section 3)
- 8. what happens to matter during physical changes (Section 2)
- 9. what happens to matter during chemical changes (Section 3)

Questions to Ask Along the Way

You can help your son or daughter learn about these topics by asking interesting questions as he or she progresses through the chapter. For example, you may wish to ask your son or daughter the following questions:

- How can you tell fool's gold from real gold?
- Do *mass* and *weight* mean the same thing?
- Is rust on an old car an example of a chemical or a physical change?
- What kind of change results when oil and vinegar are mixed together for salad dressing?

The Internet at Home

If you have Internet service at home, you and your child can access information related to the chapter entitled "The Properties of Matter." The following resources are available for your use.

*sci*LINKS: At www.scilinks.org you will find links to Web sites that have been selected by the staff at the National Science Teachers Association (NSTA). The staff at NSTA regularly scans the Internet to find sites that are current, engaging, and appropriate for middle school students. Check out the latest links by typing in the *sci*LINKS numbers listed below.

GO TO: www.scilinks.org

TOPIC: What is Matter?	sciLINKS NUMBER: HSM1662
TOPIC: Describing Matter	sciLINKS NUMBER: HSM0391
TOPIC: Physical Changes	sciLINKS NUMBER: HSM1142
TOPIC: Chemical Changes	sciLINKS NUMBER: HSM0266

go.hrw.com: The resources at this Web site come to you directly from the publisher of your child's textbook. Here you will find resources to help your son or daughter better understand the chapter entitled "The Properties of Matter." For example, *Science Puzzlers, Twisters & Teasers* worksheets use the chapter's vocabulary terms and concepts as a basis for lighthearted yet challenging science fun. For help in generating ideas for science projects, you may refer to *Long-Term Projects & Research Ideas*. You can also turn to the Resources for Parents section of the *Science Fair Guide* for information on planning, preparing, and presenting a science fair project. You can access these materials and other information by entering the keyword below.

GO TO: go.hrw.com

KEYWORD: HP5MAT

Thank you for your time and interest. Your participation in your child's education is a sure way to encourage learning!

Sincerely,