

About *Exploring Meteorite Mysteries*

Teachers and scientists designed this book to engage students in inquiry science and to extend science with interdisciplinary connections. The study of meteorites provides a unifying theme that links almost every aspect of Earth and planetary science with mathematics, physics, chemistry and even biology. The effects of meteorite impacts have serious implications for social science. The activities in this book are designed for upper elementary to high school levels. Many of the lessons begin with a simple activity and build to more complex ones. The Curriculum Content Matrix, Lesson Topic Planner and Lesson Sequence Suggestions may assist teachers in integrating the meteorite activities with their existing Earth science curricula and standards requirements.

The Teacher's Guide, *Meteorites, Clues to Solar System History*, gives a broad introduction to many aspects of meteorite science. It tells the story of solar system history from the formation of the planets to catastrophic impacts on Earth. It helps the students learn how scientists use studies of these rocks from space to decipher that history. The Meteorite ABC's and Solar System ABC's Fact Sheets contain important information about meteorites and bodies in the solar system in convenient table format.

The Activities are divided into units based on key questions students may ask about meteorites. For example, the unit entitled "Where do they come from?" contains six lessons with many activities that explore that question. The activities range from introductory impact experiments to rather complex orbit constructions that use beginning geometry. Some lessons are designed to use the Meteorite Sample Disk, although most lessons do not require the disk. All the lessons could be taught in the science classroom, but many lessons could be used in other areas. The lessons include both teacher and student pages, both of which may be copied as needed. Measurements are given in metric units with some English units in parentheses for common household items.

The book concludes with a Glossary and an Education Resources section. Key words that appear in bold in the Teachers' Guide or as vocabulary in the Activities are defined in the glossary. The Education Resources section lists specific books and supporting materials for meteorites. It also provides a guide to accessing the broad range of NASA resources for educators.

