

Exploring Meteorite Mysteries

Lesson 1 — Noblesville Fall

Mysterious Meteorites

Objectives

Students will:

- participate in a brainstorm session that will help focus their interest on and arouse their curiosity about meteorites.
- view a slide show that provides background information.

Background

Throughout the world meteorite falls are rare events that are observed just a few times a year. The fall of the Noblesville meteorite in 1991 was observed by two boys. The story of the boys and the meteorite makes an excellent focus for the unit.

Procedure

Advanced Preparation

1. Review story and be ready to tell it like a storyteller.
2. Preview slide set and narrative.



About This Lesson

Students will listen to the story of an actual meteorite fall and brainstorm on what they want to know and how they would react. The questions students generate will relate directly to the units contained in *Exploring Meteorite Mysteries* and will help teachers focus students' attention on meteorite investigations. After making a list of what they want to know, they will view a slide show introduction to meteorites.

Materials

- Noblesville Fall Narrative (pg. 1.2)
- Slide Set, Introduction
- projector
- screen
- chalkboard or overhead projector

Vocabulary

meteorite, fall, find, crater

Photo of boys courtesy of M. Lipshutz.

Classroom Procedure

1. Tell the Noblesville Fall Narrative, Part 1 with as much animation and sound effects as possible.
2. Ask the class to put themselves in the boys' place and tell how they would feel, what they would want to know, and what they would do next? Brainstorm on these questions, making a random list of responses on the board. The class could then organize the responses into groups such as Feelings, Actions, and Questions. Some of the questions students may express are: What is it? Where did it come from? How did it get here? What is it made of? How did it form? What good is it? Is it dangerous?
3. Conclude the Noblesville Fall Narrative, Part 2 about what the boys did.
4. Show slides as an introduction to meteorites.



Noblesville Meteorite

Noblesville Fall Narrative

Part 1: Observation of the fall

It was 7:00 PM and early dusk on the summer evening of August 31, 1991, in the small town of Noblesville, Indiana. Two boys, 13 year old Brodie Spaulding and 9 year old Brian Kinzie, had just finished riding bikes and were standing talking on Brodie's lawn. Suddenly they heard a low-pitched whistling sound. Then Brian saw an object spinning through the air past Brodie. The object landed with a thud on the ground 4 meters from them and rocked as it landed. The boys picked up the object, which appeared to be a stone, and found that it was slightly warm. It had made a hole 5 centimeters deep in the lawn where it landed. They looked around and couldn't find anyone who might have thrown the stone.

Stop for class brainstorm session.

Part 2: What the boys did

What Brodie and Brian did was take the stone inside to Brodie's parents. They decided to call nearby Purdue University. The mystery was solved a few days later when a Purdue professor confirmed that the rock was a meteorite. The boys let the scientists have a small portion of the meteorite for scientific studies. Today, although meteorite dealers have offered them several thousand dollars to buy the meteorite, the boys still own it.

The boys learned that meteorites are very special rocks that have fallen to Earth after traveling through the solar system. They provide clues for scientific detectives to solve the mysteries of our early solar system, the origin of the planets, and the beginning of life itself.