



## **Describing Rocks Lessons**

### **Websites**

#### **[Mineralogy 4 Kids](#)**

This Mineralogical Society of America's site for kids has good information about minerals and their properties.

( [http://www.minsocam.org/MSA/K12/K\\_12.html](http://www.minsocam.org/MSA/K12/K_12.html) )

#### **[Minerals](#)**

Here you can find color images of minerals from an alphabetized list.

( [http://webmineral.com/specimens/index.php#.UvIw8\\_IdV8E](http://webmineral.com/specimens/index.php#.UvIw8_IdV8E) )

#### **[Soil Science Education](#)**

This kids' education page is published by NASA. It contains lots of interesting facts and activities on soil.

( <http://soils.gsfc.nasa.gov/> )

#### **[What is Soil Conservation?](#)**

This site contains answers to basic questions about the physical, chemical, and biological properties of soil with a special emphasis on soil conservation.

( <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/people/outreach/> )



## Describing Rocks Lessons

### Books

#### General

##### **The Magic School Bus Inside the Earth**

By Joanna Cole; illustrated by Bruce Degen. (2003, Scholastic Inc.)

A humorous account of a teacher who takes her class on a magic school bus into the center of the earth to study rocks and minerals. Packed with pictures and captions, this book will be captivating to elementary rock hounds.

##### **National Audubon Society First Field Guide: Rocks and Minerals**

By Edward Ricciuti and Margaret W. Carruthers. (2003, Scholastic Inc.)

This child-friendly field guide is an excellent resource book. It contains clear, detailed pictures of rocks and minerals for children to use throughout the unit to identify and learn more about samples. The introductory section includes a wealth of helpful background information about many of the topics introduced in the Rocks Unit.

#### **Additional child-friendly field guides**

##### **Looking at Rocks: My First Field Guide**

By Jennifer Dussling; illustrated by Deborah and Allan Drew-Brook- Cormack. (2001, Grosset & Dunlap)

This is a good field guide to recommend to children who want to become rock hounds. Includes a section for tracking information about the rocks they collect.

##### **Rocks and Minerals (My First Pocket Guide)**

By Dr. Paul M. A. Willis; illustrated by Iain McKellar. (2002, National Geographic Society)

This is an age-appropriate field guide with simple, clear information about where you might find each rock or mineral, and details to help identify it. It also contains interesting background information and "field notes" for each rock and mineral.



### **Rocks & Minerals (Pockets)**

By Sue Fuller. (1995, DK Publishing Inc.)

This small book is packed with lots of interesting information about rocks and minerals.

### **Rocks and Minerals (Usborne Spotter's Guides)**

By Alan Wooley. (2001, Usborne Publishing Ltd.)

A compact, informative, and child-friendly field guide with large, easy-to-see pictures of each rock and mineral included.

### **Noteworthy read-alouds**

#### **The Big Rock**

Written and illustrated by Bruce Hiscock. (1999, Aladdin Library)

Tells the story of the 'big rock'—a granite boulder millions of years old. Nicely details how even though the dinosaurs and other living things have come and gone, the 'big rock' has remained essentially the same. A good read-aloud. This book applies and extends many of the concepts introduced in the Where Do Rocks Come From? lesson.

#### **Dave's Down-to-Earth Rock Shop (MathStart Level 3, Classifying)**

By Stuart J. Murphy; illustrated by Cat Bowman Smith. (2000, HarperCollins Children's Books)

As they consider sorting their rock collection by color, size, type, and hardness, Josh and Amy learn that the same objects can be organized in many different ways. Appropriate reading for early-elementary grades. This book complements the concepts presented in the Properties of Rocks lesson.

#### **Earthsteps: A Rock's Journey Through Time**

By Diane Nelson Spickert; illustrated by Marianne D. Wallace. (2010, Fulcrum Publications)

Take a walk back through time as a rock is transformed into a grain of sand over the course of millions of years. The succession of prehistoric life that serves as a backdrop for this transformation offers a wonderful sense of the vast time frame involved and will captivate children who are interested in dinosaurs.



### **How to Dig a Hole to the Other Side of the World**

By Faith McNulty; illustrated by Marc Simont. (1990, HarperCollins)

This charming book offers one boy's step-by-step instructions on how to dig the deepest hole in the world. Along the way, readers will be amused by his uncanny imagination and rewarded with a wealth of information about the earth below our feet. A lighthearted tangent to the concepts presented in the Where Do Rocks Come From? lesson.

### **The Magic School Bus: Liz Sorts It Out**

By Tracey West; illustrated by Carolyn Bracken. (1998, Scholastic, Inc.)

This book for early-elementary readers complements the concepts presented in the Properties of Rocks lesson. In it, Liz the lizard sorts Arnold's rock collection into groups by color, size, and texture.

### **The Pebble in My Pocket: A History of Our Earth**

By Meredith Hooper; illustrated by Chris Coady. (1996, Viking Children's Books)

This beautiful and interesting book follows the trail of a single pebble over millions of years. It is beautifully written and good for reading aloud, since some of the concepts will require explanation and discussion. This book applies and extends many of the concepts introduced in the Where Do Rocks Come From? lesson.

### **Rocks in His Head**

By Carol Otis Hurst; illustrated by James Stevenson. (2002, HarperCollins)

Appropriate for early-elementary readers, but also a great book to read and discuss as a class. In this engaging tale, a girl's father who collects rocks, much to the disgruntlement of others, follows his heart. His passion for rock collecting enables him to find work in a science museum during the Depression. This book is recommended in the What is a Rock? lesson as an inspiration for other budding "rock hounds," but it would also be interesting and applicable at any point during the unit.



## Other recommended books

### **How Much Is a Million?**

By David Schwartz; illustrated by Steven Kellogg. (2004, HarperCollins)

A book to read aloud to children to help them conceptualize the immensity of numbers, such as a million, billion, and trillion, that come up when talking about the geologic time scale and the age of rocks.

### **If You Find a Rock**

By Peggy Christian; illustrated by Barbara Hirsch Lember. (2008, Sandpiper)

This book celebrates rocks everywhere—as well as the mysterious and wonderful places they are found. It suggests to children the rewards of taking a closer look at these often overlooked natural objects.

### **Let's Go Rock Collecting (Let's-Read-And-Find-Out Science)**

By Roma Gans; illustrated by Holly Keller. (1997, HarperCollins Juvenile Books)

This book for early-elementary readers touches upon many of the topics that are introduced in the Rocks Unit in simple, child-friendly text that is appropriate for reading aloud or reading alone. Many kids will be caught by the idea that “the oldest things you can collect are rocks.”

### **Medusa**

By Deborah Nourse Lattimore. (2000, HarperCollins)

A retelling of the Greek myth of Medusa, a vain beauty turned by Athena's curse into a hideous monster so ugly that anyone who looked at her turned to stone, and of Perseus' quest to kill her in order to save his mother's life. A good read-aloud book, suitable for independent readers.

*There are many retellings of this myth for children. Look for other versions if the one listed above isn't available.*

The Magic School Bus Inside the Earth is the second book in the book series. The kids in Ms. Frizzle's class have been studying animal homes for almost a month. It's a relief when she announces, "Today we are going to start something new." They are going to study Earth science. For homework, the kids are supposed to bring in rocks. But when they show up with everything from concrete to muddy Styrofoam, Ms. Frizzle decides it's time for a field trip. All aboard the bus! They dig through the Earth's The Magic School Bus Explores Inside the Earth is the fourth installment in The Magic School Bus series of PC games, released in 1996 for Windows and Macintosh. Arnold has a collection of rocks and minerals, but is missing four (one per category) and it is up to the player to find all four missing rocks and minerals in each category to complete his collection. The default location before the class leaves on a field trip.