

**Annotated Reviews of Earth Science Trade Books by Dr. Stephen Mattox, GVSU
Revised November 10, 2004**

Title. Author. Illustrated by bbb. Publisher YYYY. Xx pp. Paperback
ISBN vvvvvv. \$44.44. (readability)
Comments. Standard

GEOSPHERE

General Geology

Blast Off to Earth A Look at Geography. Lareen Leedy. Holiday House 1998. 32 pp.
Paperback ISBN 0-8234-1409-4, \$12.57. (xx)

A geographic introduction to our planet that include many Earth science topics: oceans, continents, climates, and maps. Aliens visit each continent and provide an overview of climate, people, and animals. Fun and will engage your students.

Could You Ever Dig a Hole to China? David Darling. Dillon Press 1990. 59 pp. Hardcover
ISBN 0-87518-449-9, \$9.94. (xx)

Explores the layers of the Earth, plate tectonics, rocks, caves, wells and tunnels and economic deposits. Well-written with good photos. Glossary and Table of Contents.

Earth The Four Elements. Carme Sole Vendrell and J.M. Parramon. Barron's Educational
Series 1984. 28 pp. Paperback ISBN 0-8120-3596-8, \$6.95. (xx)

A simple book that briefly (a few words each feature) mentions the basic geography of Earth.

On the Day You Were Born. D. Frasier. Harcourt 1991. 40 pp. Hardcover
ISBN 0-15-257995-8, \$16.00. (xx)

The timeless pulse of the planet is the theme of this book. **An excellent and wonderful** (brief) introduction to gravity, the Sun, the moon, tides, rain, etc. **This book should be read to/by every child.** (ES) v.4 m-3, (ES) V.4 e-1, (EH) v.2 e-1, (EG) v.1 e-1, e-3

Our Earth. A. Rockwell. Harcourt 1998. 24 pp. Hardcover ISBN 0-75480-475-5, \$13.00. (xx)
Every child should hear this story. It would also serve as a beginning reader. Simple drawings and text introduces most of common features and landscapes of our planet. **Excellent.**

Planet Earth/Inside out. Gail Gibbons. William Marrow & Company 1995. 32 pp. Hardcover
ISBN 0-688-15849-8, \$4.95. (xx)

This is a good introduction on several important topics but includes several errors. The book introduces several broad themes: formation of the Earth, plate tectonics, oceans and continents, Earth's layers, earthquakes and volcanoes, landscapes, climates and life. The section on "Rocks of the Earth's Crust" is well done. No page number, text jumps from formation of the Earth (4.6 billion to break-up of Pangea 1250 million years ago) without comment on other significant events (implies nothing significant happened). Excellent writing and illustrations on compositional layers of Earth. Error: 1. On some pages the crust is equated to a plate. 2.

Drawings show ocean crust sliding under continental crust. Correction: Plates are crust and uppermost mantle that behave as rigid solids (on softer, hot, solid mantle) 3. Plates do not float on partially molten rock. Plates are on denser mantle and molten material is located at plate boundaries and hot spots (not as uniform layers in the Earth). 4. Re: earthquakes. Stress gets too great, not strain. Shows female earthquake researchers. 5. Re: volcanoes. Vent would be a better work to use instead of crater. Note: shows structure volcano. 6. Drawing of seafloor spreading incorrectly shows a wide magma chamber beneath plates. 7. Poor drawing of ocean features. 8. Error: plates and animals have been in Earth for billions not just millions of years. 9. The rock draws are adequate but most are not diagnostic. 10. On average 50-60 volcanoes erupt each year, not 20-30. 11. Pumice is not "lava" rock. It forms from explosive eruptions, not flowing lava. (EG) V.1, e.1, e.2, e.3, 3.4, h.2, e.3 (ES) V.4, e.2

The Island That Moved. Meredith Hooper. Viking 2004. 32 pp. ISBN 0-670-05882-3, \$16.99. (xx)

Hooper bases her story on a simple premise, we can convey the power of plate tectonics and teach its key concepts by looking at the history of an island off the coast of Antarctica. The story beautifully weaves the processes associated with plate tectonics with the biologic history of eight different time frames. It includes a brief summary of plate tectonics, the break up Gondwana, earthquakes, and earth's layers. Note: p. 32 crust is incorrectly correlated to plate. Also, big and small plates are squeezed and bent (not just small). Page 62 implies plates melt and molten rock is beneath plates. Some of the plate does melt but probably not all. And the mantle beneath the plate is only molten in selected places, not everywhere beneath the plate. A good book on plate tectonics with these minor corrections.

Dinosaurs

Digging up Dinosaurs. Alik Brandonberg. Haper Collins 1988. 32 pp. Paperback ISBN 0-06-445078-3, \$5.00. (xx)

Alik makes this so much fun. A girl leads us through a museum and highlights characteristics of dinosaurs and fossilization. The crew responsible for finding, preparing, and displaying fossils is described in detail, including a female paleontologist. Includes simple geologic time scale.

Excellent.

Dinosaur Bones. Alik Brandonberg. Harper Collins 1988. 32 pp. Paperback ISBN 0-06-445077-5, \$5.00. (xx)

Excellent. As always Alik **delivers important content in a clear, concise, engaging way.** He covers the discovery of fossils and important events (and a few mistakes) in unraveling their history. He notes the influence of plate tectonics on the distribution of dinosaurs and, better than any writer, places dinosaurs within context of geologic time (all using simple drawings and analogies). A basic review of dinosaurs in the Triassic, Jurassic, and Cretaceous.

Dinosaur Days. Joyce Milton. Random House 1985. 48 pp. Paperback ISBN 0-394-87023-9, \$3.99. (xx)

This book capitalizes on kids' fascination of dinosaurs to teach them days of the week and numbers to seven. The dinosaurs are beautiful, fun, and accurate. Plus a "Dinosaur Glossary" on the last page provides a one-sentence summary of each dinosaur.

Dinosaur Days. Joyce Milton. Random House 1985. 48 pp. Paperback ISBN 0-394-87023-9, \$3.99.

This reader has several excellent qualities. The science of studying dinosaurs is rarely treated this well. The content is engaging. Explanations are well-done and accurate. Lots of opportunities for extensions. (LO) 111.4 e-1

Dinosaur Time. Peggy Parish. Harper Trophy 1974. 32 pp. Paperback ISBN 0-06-44437-0, \$3.99. (xx)

An out-of-date "level-1" reader. Some errors.

Dinosaurs Are Different. Alike Brandonberg. Harper Trophy 1985. 32 pp.

ISBN 0-06-445056-2, \$4.99. (xx)

Alike continues with excellent content. All kids interested in dinos should start with this book. It outlines the classification and hierarchy of dinosaurs, describes each characteristic, and provides examples. **Excellent.**

The Dinosaur Alphabet Book. Jerry Pallota. Charlesbridge 1991. 32 pp. Paperback ISBN 0-88106-466-1, \$7.00. (8.8)

A good introduction to dinosaurs (and the alphabet). Each letter is represented by a dinosaur whose name begins with that letter. Each dinosaur is described in a brief, interesting, and sometimes humorous paragraph that students will enjoy. R-II.1 e-1, EG-V.1 m.4

Dinosaur Eggs. Jennifer Dussling. Grosset and Dunlap 2000. 48 pp. Paperback

ISBN 0-448-42093-7, \$3.99. (2.5)

This "Level 2" reader describes the discovery of sauropod eggs, how the eggs were fossilized, and how/what scientists learned from the find. **Excellent and engaging.**

Dinosaur Valley. Mitsuhiro Kurokawa. Chronicle Books 1996. 54 pp. Paperback

ISBN 0-8118-1346-0, \$7.95. (xx)

Incredible, Easily one of the most beautiful and engaging dinosaur books. Kurokawa has written two books. The first, beautifully illustrated, tells the life story of Orodromeus, a small plant-eating dinosaur from the Cretaceous. Great detail is paid to the environment and to the other dinosaurs that are encountered. Large drawings, most spanning two pages, would make sharing with larger classes easy. The "second" book revisits each illustration and explains the science in great depth. Excellent comparisons and analogies. A great resource for teachers. Includes one four-page fold out that shows numerous steps to excavating fossils. Includes an insightful "Editor's Note" and a Glossary. Buy and use this book. (EG) v.1, e.4, m.4

Gone Forever! Iguanodon. Rupert Matthews. Heinemann Library 2003. 32 pp.
ISBN 140343657-6, \$16.95. (xx)

An interesting, simple description of Iguanodon, an important early dinosaur, and how it lived. Good science vocabulary is well-explained. Also highlights science, how scientists derive facts from fossils, footprints, etc. (EG) v.1, e.4

It Could Still Be a Dinosaur. Allan Fowler. Children's Press 1993. 32 pp. Paperback
ISBN 0-516-46002-1, \$4.95. (xx)

A simple introduction to dinosaurs. Organization is elusive and many illustrations are out dated.

New Dinos: The Latest Finds! The Coolest Dinosaur Discoveries. Shelley Tanaka. Atheneum 2003. 48 pp. Hardcover ISBN 0689851839, \$16.95. (9)

Excellent. Few books **show science as a dynamic body of knowledge.** Tanaka does so using some of the latest data. How we know is weaved through the book (and so are the things we don't know and need more study). Engaging, excellent art. A compelling range of topics, new discoveries, movement, size, behavior, plate tectonics, warm vs. cold blooded, evolution of birds, meals, technology, and extinction. **Easily one of the best dinosaur books.** Glossary, Pronunciation Guide, Index, Websites, and Recommended Reading.

The Big Dinosaur Dig. Esther Ripley. DK Publishing 2003. 48 pp. Paperback
ISBN 0-7894-9290-3, \$3.99. (xx)

A wonderful level 3("Reading Alone") story that describes an expedition to find dinosaur fossils. An excellent description of how science works (rare in tradebooks). Several photos of female researchers.

p. 12 photo is not of badlands

p.12 photo is not of plains and grasslands (it is Torres del Paine).

p.13 photo shows a mammal, not a dinosaur.

p.24 yes, earthquakes do lift areas and promote erosion but other forces, such as climate change or change in base level, also lead to erosion. Follow the team from literature study, fieldwork, discovery, fossil preparation, and interpretation.

The Dinosaurs of Waterhouse Hawkins. Barbara Kerley. Scholastic Press 2001. 48 pp.
ISBN 0-439-11494-2, \$16.95. (5.8)

Waterhouse Hawkins brought dinosaurs into our vernacular in 1853 by making the first life-sized models for the Crystal Palace in London. Although the science in this book is not very deep it is rich in history and **should be read by every child.** It's a great starting place for discussing dinosaurs. Note the destruction of models in New York City is a bit disturbing it adds human elements to the story. **Read this book.** (EG-V.1 m.4, LE-III.4 e-1, LE-III.4 e-3)

What Happened to the Dinosaurs. Franklyn Branley. Harper Collins 1989. 32 pp. Paperback
ISBN 0-06-445105-4, \$5.00, (7.4)

Presents three hypotheses on why the dinosaurs disappeared. Most of the book is focused on an impact scenario. Branley presents scientific thinking well and the artist includes girls and women as scientists. (EG-V.1 m.4)

Fossils

Fossils. Holly Cefrey. Power Kids Press 2003. 24 pp. ISBN 0823964698, \$17.25. (7.5)
p12 The fish in the photo are probably from the Green River formation in Wyoming, This is a lake deposit, not an ocean deposit. Excellent. Simple but well-chosen content and excellent photographs. Introduces how fossils form, finding fossils, and learning fossils. Includes Contents, Glossary, Resources, and Index. Great to see a simple time-line that shows significant changes in life over time. Photos show female and minority scientists. (EG v.1 e.4)

Fossils. Ann Squire. Children's Press 1990. 48 pp. Paperback ISBN 0-516-26982-8, \$6.95. (6.5)
Excellent. Easily of the best books on fossils. Squire writes clearly and selects excellent content. **An excellent introduction** to the topics. Pictures are perfect and enhance understanding. Contents, page numbers, books, websites included. (LE) 111.4 e-1; (EG) V.1 e-4, m-2, m-4), (LE-III.4 e-1, LE-III.4 e-2, LEC-I.1 e-3)

Fossils Tell of Long Ago. Alik Brandonberg. Harper Collins 1997. 32 pp. Paperback ISBN 0-06-445093-7, \$5.00. (2.5).
The best book on fossils! Every child should read this book. Outstanding writing paired with perfect drawings. Captures and keeps children's interest. Describes fossilization, types of fossils, significance and scientists (with curious kids of both genders and all colors). Examples include fish, ferns, dinosaur footprints, mammoths, amber, coral, trilobites, crinoids, belemnites, an mite, brachiopod, stegosaurus, pterandon, and ichthyosaur (a great set). Includes a simple activity on making fossils casts. Buy and use this book! (EG-V.1 m.4)

If You are a Hunter of Fossil. Byrd Baylor. Aladdin Paperbacks 2001. 32 pp. Paperback ISBN 0-689-70773-8, \$5.99. (5)
Excellent. Perhaps the best introduction to fossils for young readers. Actively involves the reader in science exploration. Excellent writing with beautiful drawings that open the imagination. The guide in the story is a young woman. (C-I.1 M-1; EG v.1 e.4)

Horses Past and Present. Marianne Johnston. Power Kids Press 2000. 24 pp. Hardcover ISBN 0-8239-5206-X, \$18.75. (xx)
This series (Prehistoric Animals and Their Modern-day Relatives) is an excellent way to start your readers on the basics of evolution. This book follows the evolution of horses from their first appearance 55 million-years-ago to the present day. Influence of element and habitat are related to evolution. It includes important evolution vocabulary, glossary, index and page numbers. (EG) V.1, e.4, m.4; (LE) III.4, e.1, m.1, e.2)

Life on Earth: The Story of Evolution. Steve Jenkins. Houghton Mifflin 2002. 40 pp. Hardcover ISBN 0-618-16476-6, \$16.00. (10.2)
Outstanding! Use this book. The diversity of life is celebrated and presented from the beginning of the Earth onward. The paper collages rival photos of the most beautiful fossils (but show the plants and animals in life, not as bones). The art and excellent text guide us through geologic time. The last third of the book presents some of the basic concepts of evolution: survival, variation, mutation, emergence of new species, good designs, and extinction. The line

graph of Earth's history compressed into 24 hours is excellent. Includes further reading and a bibliography. No page numbers.

Mammoth Site Mysteries – Volume 1: Monte's Mistake.

ISBN 0-913062-09-X, (xx)

A simple poem follows a Colombian mammoth, Monte, as he makes a mistake and becomes trapped in a sinkhole. Monte becomes a fossil but is later found and featured at the museum.

Prehistoric Animals. Gail Gibbons. Holiday House 1988. 32 pp. Paperback

ISBN 0-8234-1261-x, \$6.95. (4.5)

A survey of Cenozoic mammals with a mention of sharks and birds. Shows a female and a minority paleontologists. Includes a diagram that places the animals in a time line. This books fills a niche describing the change in life in this era. (LO III.2 e.1, LO III.2 e.4, LE-III.4 e-2)

Sharks Past and Present. Marianne Johnston. Power Kids Press 1998. 24 pp. Hardcover

ISBN 0-8239-5206-1, \$18.75. (xx)

This book uses kids fascination with sharks to make some modest points about evolution. Four ancient and several modern sharks are described. There is good content with adequate photos. Lacks an organized presentation of shark evolution.

Stone Girl, Bone Girl. Laurence Anholt. Orchard Books 1998. 32 pp. Hardcover

ISBN 0-531-30148-6, \$15.95. (xx)

Start your fossil lesson here. Mary Anning is a hero. The story weaves Mary's love (and loss) of her father with the search for curiosities. In time, she finds plesiosaurs, pterosaurs, ichthyosaurs and more fossils. **Buy this book!** (C-I.1 e-1, EG-V.1 m.4)

The Birth of the Earth. Jacqui Bailey. Kids Can Press 2001. 31 pp. Paperback

ISBN 1-55337-080-5, \$7.95. (xx)

Excellent. The best book to describe, in terms kids can understand, the Big Bang, formation of the Sun, Solar System, and Earth, and the start of life on Earth (to bacteria and early cells). Fun with excellent art. Excellent time reference frame. Lots of jump off points to other topics. Mentions that Bishop Usher's age for Earth is wrong. Glossary and Index.

The Extinct Alphabet Book. Jerry Pallotta Charlesbridge 1993. Paperback 0-88106-470-X, \$6.95. (6)

Excellent, fun, and engaging. The illustrations are rich with amazing detail. The animals are alive. The paragraph on each page tells us about an animal all of us should know, and why they were important or what contributed to their demise. An excellent blend of biology and geology. (EG-V.1 e-4, m.4; LE-III.4 e-1)

Geologic Time

An Expedition on This Spot Back Through Time. Susan Goodman. Greenwillow 2004. 32 pp. Hardcover ISBN 0-688-16913-9, \$11.19. (xx)

Excellent! Goodman takes us back in time in New York City. Her eleven stops show us how the city and people changed (over the last 400 years) and how the landscapes and geology changed from Ice Age beasts, to glaciers, to oceans with abundant life, to tropical forests with dinosaurs, to tall mountains, to barren lifeless land. The book concludes with an excellent timeline.

Dinosaur Dream. Dennis Nolan. Aladdin 1994. 32 pp. Paperback ISBN 0-689-71832-2, \$6.99. (xx)

Excellent for a simple book. A young boy dreams of finding a baby apatosaurus outside his window. As they journey back to the Jurassic, they encounter the most common animals of the Quaternary, Tertiary, Cretaceous, and Jurassic (mammoths, a saber-tooth cat, and an early horse. Cretaceous dinosaurs are encountered first before the Apatosaurus reaches home in the Jurassic). A banner of silhouettes reminds us of the animals of each period. Beautifully illustrated. Engaging. Includes a time chart that puts the animals in correct stratigraphic order. **Use this book.** Lots of potential to extend into lessons. (EG) v.1, e.4)

Earthsteps: A Rock's Journey Through Time. Diane N. Spickert. Fulcrum Kids 1988. 32 pp. Hardcover ISBN 1-55591-986-3, \$18.00, (7.1)

Wow! The introduction alone is outstanding. **Rarely in a children's book is the geologic time scale so well explained.** Process, material, and time are intertwined in a good story of the rock cycle. **Excellent. The book could be used to spring board your class anywhere in geology!** Glossary. Bibliography. Probably does require prior geologic knowledge to appreciate. (EG) v.1 e-1, (EG) v.1 e-2, (EG) v.1 e-3, (EG) (EG) v.1 e-4, v.1 m-2, (EG) v.1 m-3, (EG) v.1 m-4)

Grand Canyon A Trail Through Time. Linda Vieira. Walker & Co 2000. 32 pp. ISBN 0-8027-7569-1, \$5.00. (8.7)

As the mule train heads down the trail the stories of ancient rocks and people are told. The presence of animals and their role in the canyon adds to each page. (EG-V.1 e.1)

The Dawn of Life. Jacqui Bailey. Kids Can Press 2001. 32 pp. ISBN 1-55337-072-4, \$7.95 (xx) **Excellent!** A more concise, accurate, and engaging summary of the changes in life on this planet will not be found. The "cartoons" are excellent and convey a wealth of information. The text follows life from single cells to the end of the Paleozoic (245 million years ago). The critters toss in good one-liners that add humor and keep interest. Additional, complementary text boxes add excellent, succinct, valuable insights. And kids love this book. **Buy and use it!** Glossary and Index.

Geologic Materials

A Gift From the Sea. Kate Banks. Frances Foster Books 2001. 40 pp. Hardcover ISBN 0-374-32566-9, \$16.00. (5)

Excellent. A boy finds a rock on a beach. The story traces the long history of the rock and includes volcanoes, glaciers, erosion, and rivers. **Excellent for rock cycle.** (EG-V.1 e-1, EG-V-1 e-2, GG-V.1 e-3)

Beneath Earth's Surface. Greg Roza. Rosen Publishing Group 2002. 24 pp. Paperback

ISBN 0823937186, \$18.75. (xx)

The overall content of this book is good but be cautious of numerous errors. Page numbers, contents, glossary and index included.

P. 10 Upper mantel “has a thin outer layer that is part liquid.” This is a common error. The only liquid is beneath volcanic areas.

P. 13 Volcanoes also erupt ash, not just lava. Crust is not the same as plates. “Moving liquid layer of the upper mantle.”

P. 15 “Some people believe.” No, scientists have shown that coal comes from plants. “Diamonds are created when the pressure inside Earth pushes on coal for thousands of years.” No, carbon in the mantel is the source of diamonds. And such a process requires millions of years not mere thousands.

P. 16 Regarding fossils “thousands or even millions...” No, fossils are millions, even billions of years old.

P. 23 Weak definition for oxygen. Would apply to any gas. (EG) V.1, e.2, e.3, m.2, e.4, e.5, e.6 (ES) V.4, e.1 (EH) V.2, e.3)

Coal. Christin Ditchfield. Children’s Press 2003. 48 pp. Paperback ISBN 0-516293-664, \$6.95. (6.1)

Excellent. Well written with excellent photos. A complete description including how it forms, where it’s found (with a map), types, how it is mines, jobs, uses, and environmental impacts. Includes additional resources: books, organizations, online sites and Important Words, index, table of contents and page numbers. (EG-V.1, e.2, EG-V.1 e.5, EG-V.1 e.5)

Dirt . Steve Tomecek. National Geographic 2002. 32 pp. Paperback ISBN 0-7922-8204-3, \$16.95. (4)

Excellent! A friendly mole guides us on a tour of soil. Main topics are: what makes up soil, what lives in soil, soil helps things grow, layers of soil, and uses. It includes an activity on soil ecosystems. A great book to start with.

Everybody Needs a Rock. Byrd Baylor. Aladdin Paperbacks 1974. 32 pp. Paperback ISBN 0-689-71051-8, \$6.99. (3)

The ten rules to collect a rock (“Bend over. More. Even more.”) Not much here in the way of science but a great way to engage students as they collect their first rocks. (EG-V.1 e-1)

Growing Crystals. Ann Squire. Children’s Press 2002. 47 pp. Paperback ISBN 0-516-26984-4, \$6.95. (7.4)

Excellent. Squire describes the characteristics of a mineral in simple terms and uses appropriate photos. She describes the three ways crystals form. The book concludes with directions for growing salt or sugar crystals. Error on p. 30. Obsidian forms by the gentle (not explosive) flowing of lava out of a volcano. It is not shot into the air (that’s pumice).

How to Dig a Hole to the Other Side of the World. Faith McNulty. Harper Trophy 1990. 32 pp. Paperback ISBN 0-06-443218-1, \$5.99. (xx)

Good. **A few errors made in an otherwise excellent book.** A boy digs his way through soil, crust, mantle, and core. Overall, the geology is correct. Hints of gold, groundwater, and geysers.

Errors: 1. The mantle is not magma 2. The crust is not so simple (granite on basalt) but it isn't a bad place to start. Students will enjoy this book. (EG-V.1 m.3)

If You Find a Rock. Peggy Christian. Harcourt 2000. 32 pp. Hardcover ISBN 0-15-239339-0, \$16.00. (5.1)

Not much science here, except “fossil rock” but lots of joy for enjoying the feel of a pebble in your hand or a rock against your spine. (EG-V.1 e-2, also 5.2)

It Could Still Be a Rock. Allan Fowler. Children's Press 1993. 32 pp. Paperback ISBN 0-516-46010-2, \$4.94. (2.5)

Start here! With simple text this book takes children from sand grains to the moon. A few of the most common rocks and fossils are well described. The photos are excellent and well described. The only (minor) flaw is no metamorphic rocks are presented. (EG-V.1 e.2, e.5)

Lets Go Rock Collecting. Roma Gans. HarperCollins 1997. 32 pp. Paperback ISBN 0-06-445170-4, \$5.00. (4.8)

Despite some minor flaws **this book is excellent.** The text is simple and accurate. The three rock types are described in ways children can relate to. Most of the pictures are excellent.

Start here.

P. 8-9 In the drawing crust is shown over a “solid rock layer.” Crust is solid rock too.

P. 14 Other crystals in granite are feldspar and mica.

P. 15 Poor picture of basalt

P. 16-17 Confusing the word rock for what should be the word mineral.

P. 19 Most sand is eroded from river channels and coastlines.

(EG-V.1 e.2, e.5)

Looking at Rocks. Jennifer Dussling. Grosset & Dunlap 2001. 60 pp. Paperback ISBN 0-448-42516-5, \$5.99. (1.9)

p.2 the layers around the center are not “melted rock”

p11 “During dinosaur times...” Yes, sandstone did form in the Mesozoic, but they also form in other eras too.

p.12 The Grand Canyon also has significant shale layers.

p.16 poor photo of granite

p.23 Marble is made by recrystallization (regrowth) of calcite crystals.

p.28 Pumice is not cooled lava. Lava does not shoot from volcano; it pours. Hardened lava is not pumice; it is lava. Pumice is a pyroclastic rock blown from volcanoes.

It is the result of explosive eruptions.

p.28 hot magma, not lava

This friendly book would be a weak introduction to rocks. There is no obvious organization (and no page numbers). Most of the photos are good but the drawings are too simple or encourage a simple approach to classifying rocks (“small rocks”). The use of stickers is clever.

(EG-V.1 e.2, m.2, e.5) (EG-V.1 e.2, EG-V.1 e.5, EG-V.1 m.2)

Metamorphic Rocks. Holly Cefrey. Power Kids Press 2003. 24 pp. Paperback ISBN 0823964663, \$17.25. (4.9)

A good try on a complicated topic but falls short.

p10 "rocks inside the plates press together and become new metamorphic rocks." Better if ... pressure on rocks in plates increase during collisions and cause new minerals to grow, making metamorphic rocks.

p11 picture is of folded sedimentary rocks, not metamorphic.

p14 picture of schist. Cefrey says "...the minerals in the rocks form in many different directions." Not true, you can see the mica minerals are aligned in the same direction.

p15 poor Photo. The Key characteristics of the rock are not evident.

Milo and the Magical Stones. Marcus Pfister. North-South Books 1997. 32 pp. Hardcover ISBN 1-55858-682-2, \$18.95. (3.9)

A cute and important story about greed and respect for natural resources. Suitable for environmental discussions **but not geologic materials.** (EG-V.1 e-6) (C-I.1 e-2, R-II.1 e-1; EG-V.1 e-6)

Minerals (Kaleidoscope: Earth Science). Roy A. Gallant. Benchmark Books 2000. 48 pp. Hardcover ISBN 0761410392, \$22.79. (7)

Excellent and comprehensive. Excellent text and photos. Defines mineral, describes characteristics, and uses. Introduces the types of rocks. Minor flaw (p.45); minerals are not made of sediment but all sediment (mud, silt, sand) is made of minerals. Includes instructions to grow crystals, glossary, books, websites and page numbers. (EG-V.1m.2)

Mud. Mary Lyn Ray. Voyager Books 2001. 32 pp. Paperback ISBN 0-15-202461-1, \$6.00. (2.8)

A delicious ode to having something squishy between your toes. Not much science but definitely the fun of early spring. Use it for seasons. (EG-V.1 e-2, EAW-V.3 e.2)

Oil. Christin Ditchfield. Children's Press 2002. 48 pp. Paperback ISBN 0-516-29367-2, \$6.95. (7.5)

Excellent photographs and complete in content. Describes origin, occurrence, research for, processing, drilling, careers, uses of, products made from, pollution, oil spills alternatives.

P.7 began "thousands" of years ago, no millions

P.10 rocks are "broken up, they release the oil inside"

P.11 Spurt out, not always true

P. 12-13 Check map

One experiment, references, websites, glossary, index.

(EG-V.1 e-2)

Rock and Soil. Natalie Lunis. Newbridge 1998. 16 pp. Paperback ISBN 1-56784-384-0, (2.8)

A very general introduction. Good photos. Brief text. Fossil and soil are defined. Useful for very early elementary.

Rocks. Roy Gallant. Benchmark Books 2001. 48 pp. ISBN 0-7614-1042-2, \$24.64. (7.6)

Very good. Photos are excellent. Content is good. Some errors.

P.12 "heated by the great weight of all the rock." No, rocks do not melt from increasing pressure. Increased pressure makes it harder to melt rocks.

P. 15, basalt is one fine-grained igneous rock. Rhyolite is also a common sample.

P. 25, no picture of conglomerate.

P. 26, metamorphic rocks can also be made into new metamorphic rocks.
P. 26 don't understand how they are made. Geologists do understand mm rocks.
P. 34, caption "Erosion, or weathering, ..." These are not the same process. Weathering is the break-down of minerals by physical and chemical means. Erosion is the transport of these materials. The terms are not interchangeable.
P. 42, Silicon is a metal and it is used for computer chips. It is a component, along with oxygen, to make silica, a common grain on beaches worldwide. Table of Contents, Glossary.

Rocks. Alice Flanagan. Compass Point Books 2000. 32 pp. ISBN 0-7565-0033-8, \$14.88. (xx)
This book is good but contains some errors, perhaps introduced by over simplification. The selection of topics is done well. Good photos. Minor corrections:

P. 6 Soil is also made by chemical processes.
P. 7 Sand is also made of mineral grains and fossil fragments.
P. 11 Granite forms when magma cools in the crust.
P. 13 Diamond is a mineral in an igneous rock. Tale is a mineral.
P. 17 Fossils are not outlines. They are the remains of organisms.
P. 17 Limestone also forms by precipitation from water.
P. 18 Are the Pyramids limestone?
P. 21 Metamorphic rocks can be changed into new, different type of metamorphic rock.
P. 25 The sand in the wind does the erosion.
P. 26 Glacial ice also causes erosion.

Nice section on collecting rocks.

Includes glossary, page numbers, "Did You Know?" index and "What to Know More," a list of websites, books and other resources.

Rock. Chris Oxlade. Heinemann Library 2002. 32 pp. Paperback
ISBN 140340086-5, \$6.50. (3.5)

Excellent selection of content and photos. Some of the best photos for a beginning book on rocks. Briefly cover major topics.

P8 "Underneath the crust is hot running rock called lava." In general, no, magma (not lava) is not everywhere under the crust. Also, most magma is generated beneath the plates (crust and uppermost mantle), not beneath the crust.

P9 Pressure and heat beneath volcanoes are also important in producing metamorphic rocks.

P28 "Rock does not burn when it is heated." No, coal is a rock that burns.

P28 Electricity would flow in some metal areas.

P29 "Rock is not attracted by magnets." Not true. Magnetic surveys are used to find metal-rich rocks. (EG-V.1, e.2, m.2, e.5, e.6, m.5) (EG-V.1 e.1, EG-V.1 e.3)

Rocks and Minerals. Ruth Chasek. Children's Book Press 2000. 48 pp. Paperback
ISBN 0-516-23533-8, \$6.95, (5)

Although this book has numerous errors, it is organized in a thoughtful way. Essential it guides a child from collecting, to identifying, to displaying the samples they collect. The photos, although good, are not the best for making critical points. Some captions are incomplete. Shows a young woman and a girl exploring rocks. Includes Contents, Safety Tips (well done), New Words, Further Reading, Resources and Index.

p.8 “Rocks form over millions of years...” Yes in most cases, especially for metamorphic and most sedimentary. But some igneous rocks form on a scale of days to thousands of years.

p.9 “ Quartz is a type of crystal.”

Quartz is a mineral. Types of crystal are xxx.

p.9 Sedimentary rocks are made of mineral grains too.

p.10 Limestone also precipitates from ocean water.

P.11 “Volcanoes push hot magma to the surface, ...” No, magma rises due to buoyancy and gas pressure.

P15 Glacial deposits also contain smooth, round stones (not just streams).

P16 “ The waves were down the high cliffs to rocks ...” Boulders would be more accurate than “rocks.”

P16 “ Sand is made from tiny broken bits of quartz mixed with seashells and minerals.” This statement is too general. Sand is made of mineral grains such as quartz, and rock, and fossil fragments.

P16 Regarding lakes and ponds, text is conceptually confusing. The author writes of rocks but also the “build up [of] layers over time.” Lakes are landforms and an environment where rocks are actively forming. Thus they commonly contain sediment that has not yet been converted to rock.

P16 Regarding hills and mountains, yes, they could be sedimentary layers, but they could also be granite, volcanic, or metamorphic.

P17 Cave tours are also offered in state parks, and private caves, not just national parks.

P18 Regarding deserts: “The rock may also begin to peel away in layers, just like an onion.” I don’t know what the author is referring to.

P19 Readouts can be in any type of rock or sediment, not just layers.

P30 If you have a hard specimen of sedimentary rock, you may not see layers.

P30 Regarding Igneous rocks, what is meant by “smooth texture”?

P41 Definition of metal. Not all metals are hard as stated. Copper and gold are soft.

(EG-V.1 e.3, EG-V.1 m.2, EG-V.1 m.3)

Rocks and Minerals. Ann Squire. Children’s Press 2002. 48 pp. Paperback ISBN 0613543289, \$6.95. (3.5)

Excellent. Minerals in our everyday life, layers of the Earth, definition of a mineral and properties, rock types and how they form, uses, and materials. Only error: nickel, iron, and sulfur (p.12) are elements, not minerals.

(EG-V-1 e-2, EG-V.1 m-2, e-5) (EG-V.1 e.1, e.2, e.5, m-2)

Rocks and Minerals. Judy Nayer. McClanahan Book Co. 2000. 5 pp. Paperback ISBN 1-56293-547-X, \$6.95. (xx)

Excellent, brief content. Definitions, three rock types, uses, and collecting. Most of the drawings are excellent but a few are ambiguous. A great book to get students started.

(EG) V.1, e.2, m.2, e.4, e.5)

Rocks, Gems, and Minerals. Trudi Strain Trueit. Franklin Watts Inc. 2003. 64 pp. Paperback ISBN 0-531-16241-9, \$8.95. (9.5)

An excellent, complete description of minerals' the three types of rocks, methods geologists use to study rocks, uses of materials, damage by mining, and importance of reusing and recycling. Well written with, with beautiful, well-selected photographs. The two photos of geologists show white males.

p.6 "recycling Earth's crust" The mantle is also involved in the rock cycle. Also some crust is conserved to make the stable parts of continents.

p.17 "Minerals such as..., mercury..."

Some of these metals occur in a pure state as a mineral. Mercury does not.

p.19 caption: "Strata of the metamorphic rocks..."

Strata refers to the layers of sedimentary rocks. It is not used for metamorphic rocks. "are seen above as deposits of sedimentary limestone and sandstone..." No. The parent rock might have been limestone and sandstone but that is not obvious in the photo.

p.31 top caption: Pumice is not lava. Pumice is blown from volcano. It does not pout.

bottom caption: "...basalt columns packed tightly..." Packed is a poor choice of verbs. Formed or spaced is more appropriate.

p.32 Photo appears to be upside down

(EG) v.1 e.2, m.2, e.5, m.5, h.3, h.3, h.4, e.6)(EG-V.1 e.5)

Rocks in His Head. Carol Otis Hurst. Greenwillow 2001. 32 pp. Hardcover

ISBN 0-06-029403-5, \$16.89. (4)

A nice story of a man that knows minerals and rocks. His collection and knowledge grows, even as struggles to stay employed. He finds employment in a museum and demonstrates his expertise, eventually becoming the curator.

(PME IV.1 e.1, PME IV.1 e.2)

Rocks Hard, Soft, Smooth and Rough. Natalie Rosinsky. Picture Window Books 2002. 24 pp.

Hardcover ISBN 1-4048-0015-8, \$14.88. (4.2)

Excellent. A nice bridge from the simplest rock books towards a true understanding. Covers the three rock types, how they form, and common examples. Two activities, Table of Contents, Glossary and "At the Library" and "On the Web". (EG-V.1 e.2, e-5) (EG-V.1 e.2, EG-V.1 m.2)

Sand. Ellen Prager. National Geographic Society 2000. 32 pp. Hardcover

ISBN 0-7922-7104-1, \$16.00. (6)

Sand, like all the books in this series, **is outstanding**. The content is well-thought out and thorough. The text is well written and the photographs are excellent. A friendly seagull guides children through the book. The text describes the size, color, composition, origin of, and movement of. Includes a simple experiment.

(EG-V.1 m.2)

Soil. Christen Ditchfield. Children's Press 2002. 48 pp. Paperback

ISBN 0-516-29368-0, \$6.95. (7.3)

Excellent, well-written book that covers the key concepts regarding soil: what is soil?, how it forms, horizons, components, pollution, and recycling. One simple but useful experiment. Good photographs (but additional information on photo or in caption would be useful). Includes Content, Books, Organizations, and online sites, Important Words, and Index.

P6 Soil “...can be found in every lake river and ocean.” No, sediment accumulates in these environments but soil only forms on land.

P11 “1 square foot (0.09 square meter)” Perhaps, 1 square foot (about 10,000 square cm)” would be better.

P14-15 Chemical processes also help generate soil, not only physical.

P21-23 Not all soils develop on the bedrock of an area. For example, in Michigan, soil developed on glacial material.

(EG-V.1 e.2, e.3, e.6 m.3)

The Big Rock. Bruce Hiscock. Aladdin Press 1988. 32 pp. Paperback

ISBN 0-689-82958-2, \$6.00. (6.2)

Outstanding! Excellent! Buy/use this book! A big rock in New England is used as the center point of the rock cycle. Numerous geologic processes are described accurately and well. The art is excellent and accurate. **One of the best Earth Science books.** A female geologist is shown.

(EG)-V.1 e-1, (EG) V.1 e-2, (EG-V.1 e-3, (EG-V.1 e-4

(EG-V.1 m-2, (EG-V.1 m-3) (C-I.1 e-1, EG-V.1 e.1, e-2, e-3, e-4, m-2, m-3)

The Pebble in My Pocket A History of Our Earth. Meredith Hooper and Chris Coady. Viking 1996. 32 pp. Hardcover ISBN 0-670-86259-2, \$16.99. (6.5)

Outstanding! Excellent! Few books for students are done this well. The book fuses geologic time with life, evolution, changes in the landscape and geologic materials. This book is **a springboard to any topic in geology.** Buy and use this book.

(EG-V.1 e-1, e-2, e-3, e-4, m-2, m-3)

The Quicksand Book. Tomie dePaola. Holiday House 1977. 32 pp. Paperback

ISBN 0-8234-0532-X, \$5.95. (3)

A fun story that explains the origin of quicksand and what to do if you fall in. A good read with accurate information.

(EG-V.1 e-2)

Who Wants Rocks? Michael Arvaarl Kusugak. Annick Press Ltd. 1999. 24 pp. Paperback

ISBN 1-55037-588-1, \$6.95. (2.5)

A simple, nice book that introduces the gold prospectors of the Yukon and the damage that follows their discoveries. Old Joe finds the true value is the land itself. Several “Thank god for rocks.”

Volcanoes

Fountain of Fire. Gill McBarnet. Rawanga Trading, Inc. 1987. 32 pp. Hardcover

ISBN 0-9615102-3-4, \$7.48. (xx)

Excellent. A simple story of a girl living near a volcano in Hawaii. The volcano erupts and threatens her home. A good introduction to Hawaiian-style (lava) eruptions. Good introduction to Hawaiian animals, too.

Kilauea, Hawaii’s Most Active Volcano. Kathy Furgang. Powerkids Press 2001. 24 pp.

Hardcover ISBN 0-8239-5659-8, \$19.50. (9.1)

This book's noble goal is **marred by over simplification of text (or perhaps poor wording)**. Most of the content is good intended. Most photos are adequate but could be much better. The book does not highlight the rare characteristics of Hawaii volcanoes. See list of errors at end of this text.

C-I.1 e-1, EG-V.1 e.1, EG-V.1 e.2, EG-V.1 e.3

Mount St. Helen's National Volcanic Monumental. Ted and Sharlene Nelson. Children's Press 1997. 47 pp. Paperback ISBN 0-516-26269-6, \$6.95. (6.3)

This good book provides a description of an important eruption. Excellent photos of the eruption and scientists. Including women. One minor error. On p. 5, lava is not "thrown" out of its vents. About half of the book describes (well) biological recovery.

Pele and the Rivers of Fire. Michael Nordenstrom. Bess Press 2002. 32 pp. Hardcover ISBN 1-57306-079-8, \$9.95. (7)

A wonderful story full of lava and volcanoes. Students will love the story. A great way to start a lesson on Hawaii or Hawaiian volcanoes. Lots of opportunity to extend into materials or landforms.

(EG) v.1 e-1, (EG) v.1, e-2 (EG) v.1 e-3, (EG) v.1, m-4

Ring of Fire. Leonard Hort. Chelsea Clubhouse 2003. 32 pp. Paperback ISBN 0791074315, \$7.95. (7.2)

Excellent content and photos. Text is presented in an engaging way. Covers distribution, material, types of volcanoes, earthquakes, tsunamis, and underwater vents. Table of Contents, Glossary, Index, and Websites. **One of the better volcano books on the market.**

EG-V.1 h.2

The Magic School Bus Blows Its Top. Joanna Cole. Scholastic 1996. 32 pp. Paperback ISBN 0-590-50835-0, \$3.50. (4)

Even with minor flaws this is a good book with lots of possibilities for extension, e.g, new ocean islands, black smokers, tube worms, observations of underwater volcanoes.

Page 14: Soot is the wrong word. It implies carbon. The black smokes are rich in metals.

Page 17: Crust does not equal plate

Page 17: The text suggests they are in a trench but the black smokes and tube worms are common at ocean ridges

Page 18: "rocks in the crust are melting" No. The magma in this geologic setting is made below the plate in the convecting mantle (the asthenosphere).

Page 19: "the magma chamber" The drawing shows an open cavity with splashing magma – not accurate

Page 20: Same, even more exaggerated

EG-V.1 e.1, e-2, e-3

Volcano! Bill Haduch. Dutton's Children's Books 2001. 40 pp. Paperback ISBN 0-525-46479-4, \$7.99. (5.6)

This book looked promising but there are numerous errors in the text, incorrect photos are used, and some captions are wrong. **Not worth the trouble.** Photos don't match text. Here's the errors I spotted :

p.4 lava into ocean, not Paricutin

p.5 setting up gas monitor, not for earthquakes

p.8 bottom. That's pillow lava. The vent is many miles away and on land. The lava is flowing into the ocean.

p.9 "... With iron and nickel atoms. As these atoms decay, they give off radioactivity in the form of heat and light, sort of like a star." Ouch Iron and nickel are not radioactive. Radioactive decay is not the same as the Sun's fusion. "They melt! Surround the hot core is thirty-four hundred miles of goo layer upon layer, oozing and stewing in the heat." Ouch! The author continues to be ignorant of basic facts of the Earth. The mantle is a solid. It is not "melted" as the caption states.

p.9 "strong enough to support oceans..." Implies the crust floats on liquid mantle.

p.10 "you're floating on magma" No you aren't. If this were so we'd have volcanoes randomly distributed on the earth.

p.11 "collects under volcanoes in hollow areas" This gives a false impression. There are not large hollow areas in the crust waiting to be filled.

p.11 "float on the hot magma below." Not true.

p.11 "... it melts into even more magma." Some of the plate melts, only a small percent.

p.12 The crust is not unusually thin in Hawaii.

p.12 "... plates floating around in magma..."

p.13 Experiment. This seems reasonable. I think the egg material is ejected due to a difference in pressure. Volcanoes erupt due to gas pressure.

p.14 If the photo is supposed to convey information on a caldera, it is useless.

p.15 The shield. The photo is a cinder cone, not a shield! Lava does not flow "... in all directions." It flows downhill, just like water.

p.18 Volcanic gasses. Oxygen by itself is not released by volcanoes. The common gases are water vapor, carbon dioxide, and sulfur dioxide.

p.24 "... make some rocks magnetic by baking their elections into a certain pattern." The magnetic minerals align to Earth's magnetic field. The preserved magnetic field in a rock can be disrupted by heating.

p.27 The volcanologist is protecting her face from the heat, not the smell.

(EG) v.1 e-3, e-1, h-3 (EG) v.1 e-1, (EG) v.1 e-4, (EG) v.1 m.2, (EG) v.1 h-2

Volcano! Ellen Prager. National Geographic Society 2001. 32 pp. ISBN 0-7922-8201-9, \$17.00. (6.5)

Excellent. A dragon leads the reader through on a tour of volcanoes. Topics: dormant and active, types of volcanoes, why volcanoes erupt, volcanic materials, hazards, distribution and examples. One activity. **One of the best volcano books.**

EG-V.1 e.4

Volcanoes Earth's Inner Fire. Sally M. Walker. Carolrhoda Books 1994. 56 pp. Hardcover ISBN 0876148127, (10.3)

Excellent. Easily the most complete, well-written and well-illustrated book on volcanoes on the market. The photographs are perfect for the content and the captions greatly enhanced comprehension. Analogies are frequently used, well thought out, and accurate. No errors in content. Includes: What is a Volcano?, Where do Volcanoes Form?, Magma, Lava and

Pyroclastic Flows, Types of Volcanoes, Forecasting Eruptions, and Benefits of Volcanoes. Also Contents, glossary and Index.

(EG) v.1, e.1, e.2, e.3, m.2, h.2, e.4, e.5

Volcanoes! Mountains of Fire. Eric Arnold. Random House 1997. 48 pp. Paperback
ISBN 0-679-88641-9, \$4.00. (5)

This step 4 book for grades 2-4 is a good introduction to earthquakes. The basics, especially hazards, are presented through descriptions of several significant earthquakes: Northridge 1994, San Francisco 1906, Tokyo 1923, and Alaska 1964. Minor error: P. 12 “zigzagged” is not the best way to describe the travel of earthquake waves. Waves reflect and refract. Bounce might be a better word. Also, the mantle is not liquid rock. P. 13 Crust is not the same as plates and Earthquakes also happen where plates move apart. Includes ancient myths (and modern) about earthquakes. P. 40 Map of Ring of Fire is poor and “hot, bubbling” volcanoes is a poor description. P. 41 Watching animals is not done by scientists to forecast earthquakes.

(EG) V.1, e.3

Volcanoes and Earthquakes in Action. Marianne Borgardt. Aladdin 1993. 16 pp. Hardcover
ISBN 0689717202, \$8.95. (xx)

This pop-up book starts off poorly by stating the mantle is "gooey molten rock called magma." A common error. The mantle is a solid that flows. There is small amounts of magma at some select locations. The same error is on p. 3. **Most of the pop-ups are interesting and useful.** I applaud the effort to show the four kinds of volcanoes. The small size of cinder cones and domes is noted (but the drawings of these two kinds are poor). The text is accurate on these pages and in the section on earthquakes.

(EG) V.1 e-1, (EG) V.1 e-3

Volcanoes: Nature’s Incredible Fireworks. David L. Harrison. Boyds Mills Press 2002. 32 pp.
Hardcover ISBN 1-56397-996-9, \$15.95. (4.8)

Excellent. Text is well written and the selection of topics covers the most important aspects of volcanoes. Provides numerous points to jump off into new investigations. Art is engaging, excellent, and perfectly compliments the text. Covers why volcanoes erupt, hazards, materials, distribution, types and monitoring (not in depth but a great start). Buy and use this book. **Easily one of the best volcano books.** Minor error: equates crust and plate.

Volcano Rescue: A Tonka Joe Adventure. Marty Roper. Cartwheel Books 2001. 24 pp.
Paperback ISBN 0-439-25911-8, \$3.50. (4)

Lots of truck action but the female scientist knows her volcano. She knows earthquakes are precursors to eruptions. The form of the volcano is not shown but we do see a lava lake. Tonka Joe diverts the lava by drilling through the mountain. Not likely but lava diversion, at the surface, has been successful.

(EG) v.1 e-3

Earthquakes

Danger! Earthquakes. Seymour Simon. SeaStar Books. 2002. 32 pp. Paperback

ISBN 1-58717-140-6, \$3.95. (4.7)

A “Level 2 Grades 1-3” reader with excellent content, photos and maps. Includes Richter and Mercalli, excellent distribution map, error: “The mantle is a 2,000-mile-thick layer of melted rock.” No, the mantle is a solid that flows. Error: Plates are just crust. No, plates are crust and uppermost, rigid mantle. The map of earthquake zones is out of date. Potential damage in Oregon is higher than shown.

(EG) V.1, e.3, e.4

Earthquakes. Deborah Heiligman. Scholastic Reference Books. 2003. 48 pp. Paperback
ISBN 0-439-41285-4, \$3.99. (3.3)

This “Level 2 Ages 7 and 8” reader is the best book at this level. Excellent content is well presented and accompanied with useful photos. Accurately describes Earth’s layers (rarely done well in trade books). Page numbers, glossary, and index. One “suggested Activity” and shows a female seismologist.

(EG) V.1, e.3, (EG) v.1 e.1, (EG) v.1 e.4, (EG) v.1 h.2

Earthquakes Ellen Prager. National Geographic Society. 2002. 32 pp. Hardcover
ISBN 0-792-28202-7, \$16.95. (4)

Excellent. Short, engaging, and complete. The key topics are covered well and jargon is kept to a minimum. Well written with accurate, well-thought-out analogies. Provides the key aspects: cause, distribution, effects, mitigation of effects, and safety. **Use this book.** It is a great start to an earthquake lesson. The painting of the San Andreas Fault is a bit confusing (it lacks an obvious linear feature) and it's too bad that California is caught in the binding of the map of earthquake distribution. Shows female scientists. **Probably the best earthquake book on the market.**

(EG) V.1 e-3, e.4, h.2

Landscapes

Are Mountains Growing Taller. Melvin & Gilda Berger. Scholastic, Inc. 2002. 48 pp.
Paperback ISBN 0-439-26673-4, \$5.95, (6.5)

Thirty-eight pages of questions and answers on changes in Earth's surface.

Mind-dumping. Enough errors to skip that back.

on p.5, what are the squiggles inside Mount Everest

p6 implies a global (liquid) magma ocean-error and that plates floor on this layer; equates crust and plate

p11 had science in the drawing: the rift is narrow and the typo graph is wrong (the rift is at the crust),. the trench is not labeled, zone of magma is shown wrong (they are small bodies beneath rift)

p13 only a small amount of plate melts, most sinks into the mantle. Most seamounts do not have sharp peaks.

p18 Magma rises due to buoyancy. Near the surface gas pressure drives the magma to an eruption.

p21 Composite volcanoes erupt relatively thick, sticky lava that stays close to the vent. Also, "a mix of cinder cone and shield" is incorrect and misleading.

p28 "Seaquakes" is not used by scientists.

(EG) V.1 e-1, (EG) V.1 e-3

Cave. Diane Siebert. Harper Collins Publisher. 2000. 32 pp. Hardcover ISBN 0-688-16447-1, \$16.95. (8.4)

Beautiful illustrations help tell the complete story from the deposition of limestone, to erosion, of making caves, to human impact. The formation of cave features is **well explained**.
EG-V.1 e.1

Caves and Caverns. Gail Gibbons. Voyager Books 1996. 32 pp. Paperback ISBN 0-15-201365-2, \$6.00.

Excellent. Defines and describes types of caves and common cave features.

The Deep-Sea Floor. Sneed B. Collard III. 2003. 29 pp. Paperback ISBN 1-57091-403-6, \$6.95. (5)

Good introduction to the organisms that live on the deep-sea floor and vents. Limited geologic content, some of it vague and incorrect. Useful for Biology but skip for Geology. Includes Glossary and a few web-sites.

P11 Black smokers are found at ocean ridges, not the deep canyons of ocean trenches. Most figures lack captions.

P12 “deep sea floor rides around on a high crusted plates.” Note: plate is crust and rigid upper mantle..

P12-13 not all fractures labeled in cross-section.

P13 Plate map is incomplete or caption needs more detail.

(EG) v.1, e.1

Deserts. Gail Gibbons. Holiday House 1996. 32 pp. Paperback ISBN 0-8234-1519-8, \$7.00. (3.8)

Good. Describes the climate, features, distribution, biology, recourses and people of deserts.
(EG) V.1 e-1, e-2

Erosion. Becky Olien. Bridgestone Books 2002. 24 pp. Hardcover ISBN 0-7368-09503, \$18.60. (10)

Poorly written and organized. The author does not clearly establish the difference between erosion and weathering. The photos are fine but do not best match the topics on opposing pages. Often mix weathering and erosion topics in adjacent paragraphs. Too many errors and misconceptions to be useful.

P5 “Water, wind and ice cause erosion. These powerful forces in nature break rock and soil into smaller pieces.”

First sentence is correct. Second sentence is referring to physical weathering which can take place when (transport of material) is occurring.

P7 Wind erosion forms material arches. True?

P9 “Acid in rain contributes to erosion because it makes cracks and holes in rocks.” There’s a jump here. Acid does dissolve limestone and transport ions in water.

P9 “The rocks move sand along the river bottoms.” Not sure what the author is referring to. The impact of particles in streams does lead to transfer of sediment down a stream.

P9 Slow flowing rivers erode their banks too.

P9 Arches are rarely made by rivers.

P11 “Glaciers leave behind small rocks , soil and water when they melt.” Glaciers also leave boulders. Soil is the result of weathering of material.

P13 “ about 2 billion years ago, oceans covered the Grand Canyon.” No. Misleading. Oceans covered the area that is now the Grand Canyon.

P14 The Colorado river cut into a plate to form the Grand Canyon.

P14 Rockfalls are also a major erosional force in the Grand Canyon.

P15 “pick up minerals” dissolve is a better word.

P15 carbon dioxide and minerals are not elements.

(EG) v.1, e.3, e.6

Geysers: When Earth Roars. Roy A. Gallant. Franklin Watts 1998. 64 pp. Paperback

ISBN 531158381, \$6.95. (11)

This is an excellent book that covers the origin, distribution and factors (including humans) that influence geysers. Special attention is made of Kamchatka, Iceland and Yellowstone. Includes life at deep thermal vents, plate tectonics and geothermal energy. Great photographs.

(EG-V.1 e.3, m.2, m.5)

Earth & You A Closer View. J. Patrick Lewis. Dawn Publications 2001. 34 pp. Paperback

ISBN 1-58469-015-1, \$7.95. (xx)

A poetic tour of Earth’s landscapes and our connection to them.

Earth and Us Continuous: Nature’s Past. Patrick Lewis. Dawn Publications 2001. 36 pp.

Paperback

ISBN 1-58469-023-2, \$7.95. (7)

More poetic narration that connects us to Earth’s landscapes. Could be used for climates, ecosystems, and protecting the planet.

LEC-I.1 e.4

Glaciers. Claire Llewellyn. Heinemann 2000. 32 pp. Paperback ISBN 1-58810973-9, \$7.25.

(4.2)

Excellent. Excellent text, photos, and selection of content. A great way to complement a lesson on glaciers. The maps of glaciers are an excellent inclusion. **Buy this book.**

(EG) v.1 e-1 e.3, m.1. m-1, C-I.1 e-1, LEC-I.1 e-1,

Land. Dona Herweck Rice. Teacher Created Materials 2002. 8 pp. Paperback

ISBN 0-7439-8513-3, \$2.49. (xx)

A simple introduction to types of land (biomes?) desert, grasslands, etc.

(EG) V.1 e-1

Looking Down. Steve Jenkins. Houghton Mifflin. 2003. 32 pp. Paperback ISBN 0-618-31098-3, \$5.95. (xx)

This simple little book is **brilliant** and THE PLACE to start with landscapes or maps. Jenkins starts outside of the Earth, Moon system, and gradually zooms in on the North American continent, a small town on an estuary, and a river, a neighborhood and a small boy studying a ladybug. Lots of room to explore scale and maps.

EG-V.1 e-1, m-1; EH V.2 e-1, m-2

Mapping Penny's World. Loreen Leedy. Henry Holt & Co. 2000. pp 32. ISBN 0-805061789, \$11.90. (xx)

An excellent introduction to making and using simple maps of different scales. The story is fun and engages young students.

Me on the Map. Joan Sweeney. Dragonfly Books 1998. pp 32. Paperback ISBN 0-517-88557-3, \$6.99. (1)

Excellent. A girl takes us on a tour, using maps, from her bedroom, to her street, to her town, to her state, to her country, continent, and planet, and back again. Very useful and well-done introduction to maps at many scales. Includes some map activities.

(EG) V.1, e.1, m.1, C-I.1 e-1

Mountain Dance. Thomas Locker. Harcourt 2001. pp 32. Hardcover ISBN 0-15-202622-3, \$11.20. (2)

Wow! Start here. This book blends several benchmarks and engages the reader with excellent (and accurate paintings) and well-written text. Locker writes excellent brief descriptions of the common types of mountains and his paintings are a perfect match. Some caution is needed in the "About Mountains" section that adds details at the end of the book. He implies magma is involved in making fault-block mountains. Not true, they result from heating and stretching of the lithosphere. Also, there are subtle hints that perhaps Locker believes in a global magma layer- not true. Still, **buy/use this book.**

(EG) V.1 e-1, (EG) V.1 e-3

Mountain Mudslide Rescue Heros. J. Brewster. Scholastic 2003. 24 pp. Paperback

Although it's based on TV show there's a few good points in this simple book. It does accurately portray some of the dangers of flooding and landslides. The safety of "ancient rocks" is false – the mud would flow around it.

(EG) V.1 e-3

Mountains. Andy Owen & Miranda Ashwell. Heinemann Library 2002. 32 pp. ISBN 1588109763, \$6.50. (3.8)

Excellent. Simple text and excellent guide the reader through types of mountains, their origin, and some hazards. The only flaw is not using the terms plateau and mesa for "desert mountains." The "Mountain Maps" are an excellent transition to the maps geologists use.

(EG) V.1 e-1, (EG) V.1 e-3 , (EG) V.1 m-1

Mountains. Seymour Simon. HarperTrophy 1997. 32 pp. Paperback ISBN 0-688-15477-8, \$6.00. (7.1)

These are several excellent qualities to this book. The content and photos are excellent. Different aspects and types on mountains are described. Good ma of plates and cross sections of types of mountains: fold, fault, volcanic, dome. Erosion, rain shadow, life, and people in high places are described. Some significant errors have crept into the book. Mount Everest was recently remeasured and is 29,035 feet tall. Plates do not equal crust. Includes excellent description of mountains in the ocean. "takes many thousands of years" no, millions. Fault-block mountains, like the Teton, can form in the interior of plates, not just the edges. "currents

of magma” are not involved in fault-block mountains. The plate is heated from below and becomes thinner and weaker. Regard volcanoes, lava pours out and ash is made by explosions. Cross-section is of a stratovolcano. Shows cinder cones in Hawaii, not shield (more important). Description of domes has many errors. Domes form by folding of strata. If magma is involved it is a laccoliths. The Black Hills are a dome but did not form as described in this book. Half Dome is part of an intrusion and formed by erosion – not a geological dome. The towers (they are not mountains) of Zion National Park were formed by down cutting of a river as the land surface was elevated. Wind blown sand does not erode enough to make “mountains.” No page numbers. Includes rain shadow effect, people living in mountains.
(EG) V.1, e.1, e.2, e.3, m.1 m.3, h.2; (EAW) V.3, m.3

North America. Allen Fowler. Children’s Press 2001. 32 pp. Paperback ISBN 0-516-27299-3, \$5.95. (6)

An introduction to the physical features and climates of the continent. A good start for young readers.

(EG) V.1, e.1

Our Earth. Anne F. Rockwell. Harcourt 2000. 24 pp. Hardcover ISBN 0152023836, \$13.00. (xx)

A simple overview of the geography of the Earth that includes oceans and continents, climates, landforms, and life. Only a sentence or two on each but a great introduction. A great place to start with young readers.

(EG) V.1 e-1, (EG) V.1 e-3, (EH) V.2 e-2

The Man Who Made Time Travel. Kathryn Lasky. Farrar, Straus and Giroux 2003. 48 pp. Hardcover ISBN 0-374-34788-3, \$17.00. (xx)

Explains how John Harrison made clocks to determine longitude. Beautiful book. Probably middle school.

The Mississippi River. Allan Fowler. Children’s Press 2000. 31 pp. Paperback ISBN 0516265563, \$5.95. (xx)

Most of Fowler’s books are **excellent** and this is no exception. The content is well chosen and the pictures are a perfect match. Just enough text on each page to convey a significant point. Headwaters, a good map, cities along the way, floods, delta, confluence. A great start on rivers (with some geography mixed in).

(EG) V.1 e-1

The Sun, the Wind, and Rain. Lisa Westberg Peters. Henry Holt 1990. 48 pp. Paperback ISBN 0-8050-1481-0, \$6.95. (4.5)

Outstanding! Perhaps the best book on forces that change the landscape. A girl builds a sand mountain on the beach and then watches as wind, rain, and waves wear it down. The analogies to real processes are excellent and illustrated with excellent and accurate art on the facing page. As the girl leaves she touches the rocks, tying her model to her world. **Buy and use this book!**

(EG) v.1 e-1, e-2, e-5, m-2, m-3, m-4

HYDROSPHERE

A Cool Drink of Water. Barbara Kerley. National Geographic Society 2002. 32 pp. Hardcover ISBN 0-7922-6723-0, \$16.95. (3)

Excellent. The text is minimal but exceptional National Geographic photos of the role waters plays in the lives of people around the world. Covers sources of water and uses. A summary includes a couple of sentences on each photo/location/water issue. Useful as an introduction and to show other cultures. Excellent way to learn geography and how rare water is.

(EG) v.1 e-1; (EH) v.2 e-1, e-2, e.3

A Drop Around the World. Barbara S. McKinney. Dawn Publications 1998. 32 pp. Paperback ISBN 1883220726, \$7.95. (4.2)

Excellent. The best book available on the hydrologic cycle, uses of water, and sources of water. Well written and illustrated. Easily in the top ten earth science books. The story follows a drop in and out of water reservoirs (clouds, rivers, cows, etc.) and changes in state as it travels the world. Small symbols on each page aid in interpretation. **Buy this book!**

(EG) v.2 e.1, e.2, e.3

Atlantic. Brain G. Karas. G.P. Putnam's Sons 2002. 32 pp. Hardcover ISBN 0-399-23632-5, \$15.99. (5)

Excellent. Buy this book! Simply beautiful. This book is grand sweep and hints at loads of valuable features/topics: shape, sources, plate tectonics, tides, currents, coasts, art, and personal experiences. **Use as a springboard to many lessons.**

(EG) V.1 e-1, e-e, (EH) v.2 e-1

Drip! Drop! How Water Gets to Your Tap. Barbara Seuling. Holiday House 2000. 32 pp. Hardcover ISBN 0-8234-1459-0, \$15.95. (2.5)

Excellent. Describes in a fun and energizing way, the states of water, forms of precipitation, sources and uses of water, water treatment, and conservation. Three experiments.

(EH) V.2 e-1, e-2, e-3

Follow the Water from Brook to Ocean. Arthur Dorros. HarperTrophy 1993. 32 pp. Paperback ISBN 0-06-445115-1, \$4.9p. (5)

Excellent. Well-written and good illustrations. Analogies help convey key concepts. Describes types of rivers, landforms, floods, dams, reservoir, and the path of water. **Use this book.**

(EH) V.2 e-2, m.2

It Could Still be Water. Allan Fowler. Children's Press 1993. Paperback ISBN 0-516-46003-X, \$4.95. (4)

Good introduction to the need for, uses and occurrences of water. Also changes in state. Includes "Words You Know."

(EH) V.2, e.1, e.3

Lake Superior. Ann Armbruster. Children's Press 1997. 48 pp. Paperback ISBN 0-516-26106-1, \$6.95. (4.5)

An introduction to this lake. Well illustrated, complete. Brief descriptions of geography, natural resources, history and animals.

(PCM) Iv.2 e.1, (EG) v.1, e.3

Letting Swift River Go. Jane Yolen. Little Brown 1992. 32 pp. Paperback

ISBN 0-316-96899-4, (5.5)

A beautiful story of man changing the landscape. Swift River is dammed to form a reservoir and supply water to Boston. Well told. Not much science but excellent conservation.

(EG) V.1 e.1, e.4 m-5, (EH) v.2 e.1, e-3, m.1

The Earth is Mostly Ocean. Allan Fowler. Children's Press 1996. 32 pp. Paperback

ISBN 0-516-46038-2, \$4.95. (4.7)

Good introduction to the general characteristics of the ocean. Includes distribution, depths, features, tides (and their cause) and life. Also, "Words to Know."

(EG) V.1, e.1; (EH) V.2, m.1

The Mississippi River. Allan Fowler. Children's Press 2000. 31 pp. Paperback

ISBN 0-516-26556-3, \$5.95. (5)

A wonderful introduction to this river, and rivers in general. Well illustrated. Explains falls, confluence, and delta.

EG V.1 e.1

Magic School Bus Wet All Over. Joanna Cole. Scholastic 1996. 32 pp. Paperback

ISBN 0-59052833-4, \$3.50. (3.3)

This book is derived from the script for the TV show. It is not the excellent writing and content that Joanna Cole provides. It is a fun, accurate description of part of the water cycle (surface water, atmosphere) but ignores ground water (where about half of us get our water). A good book to start with.

(EG) v.2 e.1, e.2, e.3, e.4, m.1, (EG) v.1 e.14

The Pacific Ocean. David Peterson. Children's Press 2000. 48 pp.

ISBN 0-516-27322-1, \$6.95. (xx)

Good content, important topic, but some minor errors (most related to photos).

P. 9, the photo for the Bering Strait is inappropriate. The photo shows a narrow body of water, a mile or so wide. The Bering Strait is tens of miles across.

P. 11, it is implied that volcanoes cause "Hugh" earthquakes. This is wrong. Small earthquakes accompany magnetic movement and eruption. Large earthquakes are the result of tectonic forces.

P. 13, Photo. Misidentifies continental rise as abyss. The continental abyss is the deep, flat sediment filled part of the ocean basins.

P. 15, this is the Puu Oo vent of Kilauea volcano, Hawaii. It is not Mauna Loa as stated.

P. 14 Ls, MI a seamount?

Topics: size, maps, exploration, geography, features, volcanoes, waves, currents, tides, tsunami, biology. **Worth a read but be cautious on a few pages.**

(EG) v.1 e-1, (EH) v.2 e-1, m-1 errors

Rivers: Nature's Wonderous Waterways. David L. Harrison. Boyds Mills Press 2002. 32 pp. Hardcover ISBN 1-56397-968-3, \$15.95. (4.4)

Excellent. Describes water cycle, uses of water, erosion, river landforms, and care of rivers (to prevent pollution). Note: not all rivers start in the mountains.
(EH) V.2 e-2; (EG) V.1 e-1, e-3, LEC-I.1 e-5

The Snowflake: A Water Cycle Story. Neil Waldman. Millbrook Press 2003. 32 pp. Hardcover ISBN 0-7613-2347-3, (7)

Excellent. This book hits several standards using well-written, capturing text and beautiful illustrations. The story follows a snowflake's journey through a calendar year. Along the way the flake changes state, flows downstream, and gets used in several ways. Could also be used to describe clouds and relate them to weather conditions. Two minor errors. Most ponds do not supply water to underground streams (March) and stars are not visible through the dark part of a crescent moon (November). **Buy this book!**
(EH) V-2 e-1, (EH) V-2 e-2, (EH) V-2 e-3, (EH) V-2 m-3

St. Lawrence Seaway. Ann Armbruster. Children's Press 1997. 48 pp. Paperback ISBN 0-516-26114-2, \$6.95. (xx)

A lot of information in this small book. Brief but complete history. Also transportation, industry, and geography. A good map. Little geology but good description of this river.

The Drop in My Drink. Meredith Hooper. Viking Books 1998. 32 pp. Hardcover ISBN 0-670-87618-6, (5.6)

Excellent. Hooper's books are exceptional. She weaves water through Earth's history, materials, and life. All leading towards sources. Lots of points to jump off or link to other topics. Not dry facts. An engaging story.
(EG) V.1, e.1, e.3, e.4, e.6; (EH) V.2, e.1, e.3; (EAW) V.3, m.3

Wally & Deanna's Groundwater Adventures. Leanne Appleby & Peter Russell. Benchmark Books 1993. 24 pp. Paperback ISBN 0-9697833-0-2, \$5.00. (4.9)

Wally, a water droplet, follows Deanna as she percolates through the ground and moves through the water cycle. Excellent, accurate and engaging! Buy and use this book! The final drawing is simple but a perfect summary of the water cycle.
C-I.1 e-1, (EH) v.2 e-1, e-2, e-3

Water. Frank Asch. Voyager Books 2000. 32 pp. Paperback ISBN 0-15-202348-8, \$6.00. (1)

Simple but very good. Excellent for early elementary. Describes examples of water in each state, flow, where water exists. Beautiful art work.
(EH) V.2 e-1 e-2, e.1, e.4

Water. Chris Oxlade. Heinemann 2002. 32 pp. Paperback ISBN 1588105881, \$6.50. (3.5)

A great introduction to water. Includes "What is Water?" properties, "Ice and Stream," "Clouds and Rain," "Finding Water," "Water to Your Home," "Drinking Water." Also, uses pollution. Includes contents, Fact File, glossary, page numbers and More Books to Read, index.
(EH) V.2, e.1, e.2, e.3, e.10, m.3, m.4

Water. St. Thomas C. E. and Prmiary School. Two-Can Publishers 2001. 48 pp. Paperback ISBN 1-58728-469-3, \$14.95. (xx)

Simple sentences describe general characteristics of water, where it is and what it is used for. Very brief.

Water Dance. Thomas Locker. Voyager Books 2002. 32 pp. Paperback ISBN 0-15-216396-4, \$6.00. (2.4)

Excellent. Poetic with beautiful art. A complete description of the water cycle. Summary by Candace Christiansen adds valuable depth. Use this book.

(EH) V.2, e.1, e.2, e.3; (EG) V.1, e.1, e.3, m.3

Water, Water Everywhere. Melvin & Gilda Berger. Ideals Publication 1995. 48 pp. Paperback ISBN 1-57102-042-X, \$5.00. (2.5)

A complete book of the water cycle. Includes change of state, common examples of water in these states, types of precipitation, sources of water, water treatment, water uses. Index and page numbers included.

Minor error: groundwater is not in pools; layers are a more accurate description.

(EH) V.2, e.1, e.3, m.3; (EAW) V.3, m.3

Where Do Puddles Go? Fay Robinson. Children's Press 1995. 32 pp. Paperback ISBN 0-516-46036-6, \$4.95. (4.3)

Good introduction to the water cycle. Two simple experiments. Simple cartoons to explain evaporation, condensation, and water cycle.

Where Does Water Come From? C. Vance Cast. Barrons Juveniles 1992. 40 pp. Paperback ISBN 0812046420, \$5.95. (2.8)

A complete, concise description of how we use water and where water comes from and how it is treated, and a bit on the water cycle. Clever Calvin leads the tour (and Keeps our interest). **A great book to start with.** Includes a few good classroom activities and a glossary.

(EH) V-2 e-1, (EH) V-2 e-3, (EH) V-2 m-3

Where the River Begins. Thomas Locker. Pied Piper 1993. 28 pp. Paperback ISBN 0-14054595-6, \$6.99. (4.9)

Two boys and their grandfather hike upstream to find the source of the river that flows past their home. The story describes changes of the river, rainfall and flooding. Great for rivers and hydrologic cycle.

EH V-2 e.2, EG V.1 e.1

ATMOSPHERE

Air is All Around You. Franklyn M. Branley. Harper Trophy 1986. 32 pp. Paperback ISBN 0-06-445048-1, \$5.00. (1)

A simple, engaging way to start a lesson on the qualities of air. Simple, useful experiments are presented in the text. Covers air being everywhere (occupying space), exerting pressure, surrounding Earth, dissolved in water. **Very useful**, like all of Branley's books.
EG V.3 m.2

Clouds. Ted O'Hare. Rourke Publishing 2002. 24 pp. Paperback ISBN 1589525701, \$4.95. (xx)
Fine. Describes three major types of clouds.

Clouds. Marion Dane Bauer. Aladdin 2005. 32 pp.
ISBN: 0-689-85441-2, \$3.99. (xx)

This set of "Level 1" readers (along with Rain, Wind, Snow) provides excellent weather content. Basic, important key concepts are conveyed in simple text and art. Bauer explains fog, three types of clouds, and more. A great place to start. **Use this set of four books.**

The Cloud Book. Tomie de Paola. Holiday House 1984. 32 pp.
ISBN 0-8234-0531-1, \$6.95. (6.2)

Excellent. Start here. De Paola's simple art and text grabs kids and keeps them. The content is presented so clearly and completely. The art is perfect. Cloud classification is provided and what the clouds mean. Some folklore, fun, and weather expressions too. **Buy and use this beautiful book.**

EAW v.3 e.1, m.3

Down Comes the Rain. Franklyn M. Branley. Harper Trophy 1997. 32 pp. Paperback ISBN 0-06-445166-6, \$5.00. (4.3)

Excellent. Simple text but strong in content. Includes water cycle, how clouds form, forms of precipitation, and a couple experiments. Very useful.
LEC-I.1 e-10, PMC-I.1 e-4, EG-v.1 e.2

Feel the Wind. Arthus Dorros. Harper Trophy 1990. 32 pp. Paperback ISBN 0-06-445095-3, \$4.99. (3.1)

A "Stage 2" Lets-Read-And-Find-Out-About-Science book that describes how we sense the wind. Clear description how heat from the sun generates wind, why air moves, the influence of surface work done by wind, determining directions, types of local winds. Includes instructions on making a weather vane. A great book to start a lesson on wind or weather.
EG V.3 h.2

Flash, Crash, Rumble and Roll. Franklyn Mansfield Branley. Harper Trophy 1999. 32 pp. Paperback ISBN 0-06-445179-8, \$4.99. (2.3)

Excellent description of lightning, thunder, and thunderstorms. Lots of analogies and simple text explain key concepts. Two experiments and websites included.

Hurricane. David Wiesner. Clarion Books 1992. 32 pp. Paperback ISBN 0-395-62974-8, \$6.95. (2.8)

The book starts with a family preparing for a hurricane but veers into a flight of imagination as the children explore a downed tree. Good for but limited science
? if winds of 50 mph and gusty to 90 mph evacuate?
EG V.3 e.3

It's Winter. Linda Glaser. The Millbrook Press 2002. 32 pp. Paperback ISBN 0-7163-1680-9, \$7.95. (3)

The focus is mostly on what animals do in the winter. Not much about weather.
(EAW) V.3 e-2, R-II.1 e-2, LO-III.2 e-3, LE-III.4 e-2

Lightning. Seymour Simon. Harper Trophy 1999. 32 pp. Paperback ISBN 0-688-16706-3, \$6.99. (xx)

Excellent detailed description of lightning. Excellent photos. Includes safety.
(EAW) V.3 e-3

Magic School Bus Inside a Hurricane. Joanna Cole. Scholastic Trade 1995. 48 pp. Paperback ISBN 0-590-44687-8, \$7.95. (4)

Excellent. The depth of content is amazing (easily a chapter in a text book) but this is fun. Rich. Same great art that Dergen always provides. Plenty of activities. **Use this book.**
(EAW) v.3 e.1, e-3

Clouds (Now I Know). Roy Wandelmaier. Troll Communication 1985. 32 pp. Paperback ISBN 0-8167-0338-8, (xx)

Very simple text. For beginners. Covers types of clouds and how clouds are important.

On the Same Day in March: A Tour of the World's Weather. Marilyn Singer. Harper Collins Publishers 2000. 40 pp. Hardcover ISBN 0-06-028187-1, \$15.95. (4.6)

Excellent. **Easily one of the best Earth science books.** Visit sixteen countries on the same day and observe the interweaving of life, plants, animals, and weather. The book opens the door to climate, biomes, and geography. **Buy and use this book.**
(EH) v.2 e.1, (EAW) v.3 e-1, h-1, (ES) v.4 m-2

Pink Snow and Other Weird Weather. Jennifer Dussling & Heidi Petach. Grosset & Dunlap 1998. 32 pp. Paperback ISBN 0448418584, \$3.99. (4.2)

A fun way to enjoy your students in weather. Touches on lots of topics and does explain the science behind some weird events.
(EAW) V.3 e-1, e.2

Rain. Marion Dane Bauer. Aladdin 2004. 32 pp. ISBN 0-689-85439-0, \$3.99. (xx)

This **level 1 reader** is fun, easy, and presents worthwhile content how clouds form, where puddles go, and hints at the hydrologic cycle. One page of "Facts on Rain".
(EAW) V.3 e-1, e.2

Sky Tree. Thomas Locker. Harper Collins 1995. 40 pp. Hardcover ISBN 0-06-024883-1, \$16.99. (3.8)

A single tree stands witness to their change of seasons. Excellent.

(EAW) V.3 e.1, e-2

Snow. John Bianchi & Frank B. Edwards. Bungalow Books 1992. 48 pp. Paperback ISBN 0-921285-09-4, \$7.95. (xx)

A level-1 reader with excellent content. Describes general aspects of snow/winter and how the spring melt supplies water. The last page has several bulleted facts.

Super Storms. Seymour Simon. SeaStar Books. 32 pp. Paperback ISBN 1-58717-138-4, \$3.95. (3)

This "Level 2 (Grades 1-3)" reader introduces severe weather to youngsters. Brief but excellent. Full of numbers. Nice map of tornado frequency.

(EAW) V.3, e.1, e.2, e.3, m.1, h.2

The Big Storm. Bruce Hiscock. Aladdin Paperbacks. 28 pp. Paperback ISBN 0-689-83265-6, \$4.00. (6)

This well-illustrated book answers the question "where do storms come from?" by tracking a large storm in March 1982 as it tracks across the country. The impacts of rain, blizzards, tornadoes and hail are described and their origin are explained. The weather maps and diagrams are excellent. **Perhaps the single best book on weather.**

(EAW) V.3 e-1, (EAW) V.3 m-1, (EAW) V.3 m-3, (EAW) V.3 h-2, (EAW) V.3 h-3

Tornado Alert. Franklyn M. Branley. Harper Collins. 32 pp. Paperback ISBN 0-06-445094-5, \$6.00. (6.3)

Good information and drawings. Includes pages on safety, why tornadoes form, when and where.

(EAW) V.3 e-3

Twister. Darleen Bailey Beard. Farrar Staus Giroux. 30 pp. Hardcover ISBN 0-374-37977-7, \$15.00. (xx)

Excellent. A captivating story of a family protecting themselves from a tornado. Lots of good qualities. Perfect for tornado safety.

(EAW) V.3 e-3

Twisters! Lucille Recht Penner. Random House Merchandising. 48 pp. Paperback ISBN 679882715, \$3.99. (6)

This simple reading book is for grades 1-3. It is rich in factual content on tornadoes and hurricanes, safety, and detection. Lots of fun facts sustain interest. **A great way to start a lesson on tornadoes.** Some discussion on deaths caused by storms.

(EAW) V.3 e-1 (EAW) V.3 e-2, e-3

Weather Dona Herweck Rice. Teacher Created Material. 8 pp. Paperback ISBN 0-7439-8515-X, \$2.49. (xx)

Simple sentences describe general characteristics of water, where it is and what it is used for. Very brief.

Weather at Your Fingertips. Judy Nayer. Learning Horizons, Inc. 1999. 10 pp. Hardcover

ISBN 0-76810-102-6, \$13.30. (3)

A large simple board book with ten pages of content. Includes seasons, temperature, clouds, forms of precipitation, stormy weather, and watching the weather.

(EG) v.3 e.1, e.2, e.3, m.1, m.2, m.3

Weather Signs. Ted O’Hare. Rourke Publishing 2003. 24 pp. Paperback ISBN 1589527747, \$4.95. (xx)

This book offers two paragraphs on numerous things that change before the weather does: clouds, rainbows, plants, and animals. Might be a good way to increase awareness in your students.

(EAW) v.3 e-1, (EAW) v.3 m-2

What Makes It Rain? The Story of a Raindrop. Keith Brandt. Troll 1982. 30 pp. Paperback ISBN 0-89375-583-4, \$6.95. (3.8)

A good, complete description of change of state for water, the water cycle, and distribution of water. Minor flaw: not all stream water begins as snowfall on “faraway” mountains. Note: local groundwater keeps many streams flowing in dry summer months or in drought.

(EH) V.2, e.1, e.2, e.3, (EAW) V.3, m.3

What Makes the Seasons. Megan Montague Cash. Viking 2003. 40 pp. Hardcover ISBN 0-670-03598-X, \$15.99. (xx)

Excellent. The only beginner book on seasons that **shows the tilt of the Earth and the Earth orbiting the Sun.** Also references to length of day and intensity of sunlight. Also cites the common activities of each season. Minor flaw: the winter and summer Sun are the same height above the horizon (possible) but stressing the change in height would have been nice.

EAW V.3 e.2

When a Storm Comes Up. Allan Fowler. Children’s Press 1995. 32 pp. Paperback ISBN 0-516-46035-8, \$4.95. (4.3)

A great start on your weather unit. It introduces most of the vocabulary for storms types of precipitation, hurricanes and tornadoes. The photos are engaging.

(EAW) V.3 e-1, (EAW) V.3 e-3

SOLAR SYSTEM, GALAXIES, UNIVERSE

Born with a Bang: Book One. Jennifer Morgan. Dawn Publications 2002. 48 pp. Paperback
ISBN 1584690321, \$9.95. (xx)

Excellent. Wow, few authors dare take on the origin of the Cosmos. Morgan has written an **elegant, scientifically accurate story** that traces us/time from the Big Bang to Earth. Along the way she reminds us of our place in the Universe and the beautiful mysteries of the changes over the last eight billion years or so. The timeline, a header on most pages, traces our history. Don't let the terminology stop you. Students need exposure to atoms and billions early on. Includes three pages of scientific explanation, with real images, a Glossary, and a long list of Resources.

Constellations. Paul Sipiera. Children's Press 1997. 48 pp.
ISBN 0-516-26167-3, \$6.95. (7)

A fairly complete description of constellations: history, legends, uses and how to find. A bit dense. Nice photos of real constellations adjacent to constellation chart and drawing.

Energy from the Sun. Allan Fowler. Children's Press 1998. 32 pp. Paperback
ISBN 0-516-26255-6, \$4.95. (xx)

Simple description of how plants and animals get energy, how fossil fuels form, and how we use energy in our daily lives.

Footprints on the Moon. Alexandra Siy. Charlesbridge 2001. 32 pp. Paperback
ISBN 1-57091-409-5, \$7.95. (xx)

Brief overview of phases and history of our understanding of the moon. Very good photographs (classic, historic photos all children should see). A good concise summary of the Gemini and Apollo programs. Brief mention of new scientific results. Mentions the hazards of space exploration. Up-to-date with mention of Lunar Prospector (1998). Includes time line, websites, and resources.

Galileo's Treasure Box. Catherine Brighton. Walker Publishing Co. 2001. 32 pp. Hardcover
ISBN 0-8027-8768-1, \$16.95. (xx)

A cute, brief book that touches on the idea of Galileo's telescope and gravity from the perspective of his daughter. Galileo's daughter finds a box containing her father's treasure, lenses for telescopes and microscopes and a feature. The simple book introduces this scientist to young readers. There is no detail on Galileo's contributions to science.

Glittering Galaxies. Jerry Smith. Grosset & Dunlap 2001. 24 pp. Paperback
ISBN 0-448-42531-9, \$3.99. (xx)

Some kids take a quick trip to the edges of the solar system. **Little value**, except vocabulary. Some simplifications lead to errors, e.g. stars being "all shapes" and Saturn's rings made of "all sorts of things."

Glow in the Dark Constellations. C.E. Thompson. Grosset & Dunlap 1999. 32 pp. Paperback
ISBN 0-448-41253-5, \$8.99. (xx)

This fun book is a great way to start students on constellations. The major constellations are divided by season. After the mythology of the name is told, the pattern of stars is described. On the opposite page are glow dots that define the constellation. Great with a flashlight.

I Know About Planets. Chis Jaeggi. Rand McNally 1995. 24 pp. Paperback
ISBN 0-528-83734-6, \$5.00. (xx)

Simple. A good start on the Solar System. A few sentences on the Sun and each planet. The drawings are basic but accurate. Minor error: We would not float on the Moon (but we could jump higher).

(ES) v.4 e-1, e-2

Kingdom of the Sun. Jacqueline Mitton. National Geographic Society 2001. 32 pp. Hardcover
ISBN 0-7922-7220-x , \$16.95. (4.8)

The artwork and illustration of this book captures your eye. The characteristics of each planet are represented, subtly, in each image. Featured prominently is the god or goddess associated with the planet. The text is limited but **rich, almost poetic**. A fun way to hook young students on planets. Comparison to Zoo in the Sky. **Excellent**.

(ES) v.4 e.1, e.2

Maria's Comet. Deborah Hopkinson. Aladdin Paperbacks 2003. 32 pp. Paperback
ISBN 0-689-85678-4, \$6.99. (xx)

A fictional account of Maria Mitchell's childhood and the fascination with stars and comets. Includes two pages on Maria's work and other important astronomers. Great for the girls (and boys) in your class.

Martian Rock. Carol Diggory Shields. Candlewick Press 1999. 40 pp. Hardcover
ISBN 0763605980, \$11.19. (3)

A carload of Martians heads out across the Solar System, looking for life. Between the rhyming and cutesiness the book there are some worthwhile facts, some errors, and some speculation. The book, inspired by the find of a Martian meteorite in Antarctica, never treats the topic in a meaningful way. There are two pages of factual information at the end, a bit late. Fun to read but little use in class.

(ES) V.4 e-1, (ES) V.4 m-1

My First Book of Space. Robert Bell & Rosanna Hansen. Simon & Schuster 1985. 48 pp.
Hardcover ISBN 0671602624, \$13.95. (5.8)

Clear factual description of the solar system. Great images.

My Picture Book of the Planets. Nancy E. Krulik. Scholastic 1991. Paperback
ISBN 0-590-43907-3, \$2.50. (xx)

A good start on learning the characteristics of the planets. The photos are good but a bit dated and some of the text probably needs revision.

(ES) V.4 m-1

My Place in Space. Sally & Robin Hirst. Orchard Books 1992. 40 pp. Paperback
ISBN 0-531-07030-1, \$6.95. (xx)

Skip your textbook and read this! A boy, Henry Wilson, explains to his bus driver where he is in universe. A more succinct and entertaining galactic address has never been given. A great book! But beware, there are some odd goings-on in the background.

(ES) V-4 h-2

The Mystery of Mars. Sally Ride and Tam O'Shaughnessy. Crown 1999. 48 pp. Hardcover ISBN 0517709716, \$17.95 . (xx)

This book is incredible. The text is clear and concise and the images are well chosen and stunning. Analogies and explanations are simple and useful. Probably too much for elementary, but a must-read for middle or high school. Refers to future astronauts as "she."

p.31 "float in a sea of molten rock"; "Earth's molten interior."

An excellent compare/contrast of Mars/Earth.

Once Upon a Starry Sky A Book of Constellations. Jacqueline Mitton. National Geographic 2004. 32 pp. ISBN 0-7922-6332-4, \$11.87. (xx)

Excellent. Hear the myths of heroes, beasts and princesses that make ten constellations.

Beautiful art. Each myth includes a bit of starry truth. The book concludes with brief sections on Stars, Nebulae, and Galaxies; Constellations; and more specific astronomical facts about each constellation. **A fun way to start constellations.**

Planets. Jennifer Dussling. Grosset & Dunlap 2000. 48 pp. Paperback ISBN 0-448-42406-1, \$3.99. (2.7)

Excellent. Excellent content. Includes key characteristics of each planet. Well illustrated. A reader. One minor error. P.14. Venus is also an evening planet.

Rockets and Spaceships. Karen Wallace. D-K Publishing 2001. 32 pp. Paperback ISBN 0-7894-7359-3, \$3.95. (xx)

Good photos introduce the reader to the basics of rockets, the space shuttle and space probes. Information on astronauts is a bit disjointed.

Scrambled Planets. Adam Beechen. Simon Spotlight 2003. 32 pp. Paperback ISBN 0-689-85493-5, \$6.99. (xx)

Jimmy Neutron puts the planets in alphabetical order to make their names easy to remember but Earth's new position near the sun makes life too hot. Jimmy visits all the planets and describes their most important characteristics as he solves the problem (he created). Keeps kids attention with reasonable art and content.

Shapes in the Sky: A Book about Clouds. Joseph Sherman. Picture Window Books 2003. 24 pp. Hardcover ISBN 1-4048-0097-2, \$15.82. (xx)

Excellent. This book presents the basics in an engaging and excellent way. Explains what a cloud is and the four basic types. It includes an assessment in the reading as well a Table of Contents, page numbers, glossary, Fast Facts, To Learn More, and an index. One experiment, "You Can Make a Cloud," is also available.

(EAM) V.3, e.1, m.1

So That's How the Moon Changes Shape. Allan Fowler. Children's Press 1991. 32 pp. Paperback ISBN 0-516-44917-6, \$4.95. (3)

A simple introduction to the Moon changing shape. Lots of photos and naming of phases. Text and a diagram describe the Moon's orbit around Earth. Hints at why phases change. A good start. (ES) v.4 e.1, e-2, m-2, m-3

Sometimes Moon. Carole Lexa Schaefer. Dragonfly Books 2001. 32 pp. Paperback ISBN 0-440-41739-2, \$3.00. (4.5)

A girl compares the objects around her to the phases of the Moon. Well done with an accurate summary. (ES) v.4 e.1

Stars. Jennifer Dussling. Grosset & Dunlap 1996. 32 pp. Paperback ISBN 0448411482, \$3.99. (1.8)

This beginning reader has **excellent content and is fun to read**. Simple analysis makes concepts easier to understand. Topics: number and size of stars, comparison of size of Earth and Sun, solar eclipse, a few constellations. A great start. (ES) v.4 e-1, m-3

Stars. Steve Tomacek. National Geographic 2003. 32 pp. ISBN 0-7922-6955-1, \$16.95. (2.6)

This outstanding book briefly covers the major topics related to stars and the changing night sky. Topics include distance, size color, temperature and constellations.

Stars in the Sky. Allan Fowler. Children's Press 1996. 32 pp. ISBN 0-516-06055-4, \$13.65. (xx)

An excellent introduction to the basic key concepts about stars. It includes size, temperature, color, composition, emitted and reflected light (in simple terms), distance to the stars, star clusters and galaxies, number of stars and the North Star. A female astronomer is shown and also includes "Words to Know," and an index.

Swing Around the Sun. Barbara Juster Esbensen. Lerner Publishing Group 1976. 72 pp. Hardcover ISBN 876141432, \$16.95. (xx)

Nice poems about the seasons. Might engage the reader. Little science.

The Big Dipper. Franklyn Branley. Harper Trophy 1991. 32 pp. Paperback ISBN 0-06-445100-3, \$5.00. (xx)

This simple, enjoyable book will teach your students how to find the Big and Little Dippers and Polaris. Some legend and fun mixed in.

The Big Dipper and You. E.C. Krupp. William Morrow 1999. 48 pp. Paperback ISBN 0-688-16702-0, \$5.95. (6.5)

Wow, this book is **rich in content** (way beyond the title). Topics: motion around Polaris; legends; rotation of Earth; position of North Star from Earth; Earth and the Sun; seasons using the polar stars for time of day, time of year; cultures, finding other constellations; relative

position of Big Dipper stars, and changes in the pole star. It teaches the basics of celestial motions by cleverly using the polar constellations. Fun to read.

(ES) v.4 e.1, e.2

The Earth Under the Sky Bear's Feet. Joseph Bruchac & Thomas Locker. Putnam 1998.

32 pp. Paperback ISBN 0-698-11647-X, \$6.99. (xx)

This set of Native American poems will engage students in the stars and constellations. Thomas Locker's art is magnificent

The History News in Space. Michael Johnstone. Candlewick Press 1999. 32 pp. Hardcover

ISBN 0-7636-0490-9, \$16.99. (xx)

This captivating book fills a void in history of science. The newspaper format is easy to read and serves history in nice size bites. Coverage is complete from the ancient Greeks to 2000. The one-page timeline is useful.

The Librarian Who Measured the Earth. Kathryn Lasky. Little Brown 1994. 48 pp.

Hardcover ISBN 0-316-51526-4, \$17.95. (xx)

This wonderful book follows the life of Eratosthenes from childhood to his appointment to the Great Library at Alexandria. His method of using geometry to measure the circumference of the Earth is beautifully and elegantly explained (far better than any textbook). **A must read.**

The Magic School Bus Sees Stars. Nancy White. Scholastic Trade 1999. 32 pp. Paperback

ISBN 0-590-18732-5, \$4.00. (xx)

Very good. The class looks at a young star, a stable star like our sun, and a red giant that makes a supernova. Also a brief summary of how stars form. **Worth a read.**

The Moon. Carmen Bredeson. Children's Press 2003. 32 pp. Paperback ISBN 0-516-27770-7, \$4.95. (2.6)

The content of this small book was selected well. The text is concise and accounts and the photos are useful. The book covers the origin and age of the Moon, features and human exploration. A great start in comparing the Earth, Sun and Moon.

The Moon Book. Gail Gibbons. Holiday House 1998. 32 pp. Paperback ISBN 0-8234-1364-0, \$6.95. (xx)

A good book to start with to introduce most topics about the moon. Some drawings don't include Sun to help explain phases, etc. Drawings, not photos.

The Moon Seems to Change. Franklyn M. Branley. Harper Collins 1992. 32 pp. Paperback ISBN 0-690-04585-9, \$5.00. (2.5)

A complete description of the phases of the Moon, how the Moon orbits Earth, why we see the phases, the rotation of the Earth and Moon. Simple but effective demonstrations are part of the text and well illustrated. The best book on phases. Too bad they didn't revise the drawing of the far side of the Moon when the book was revised in 1987.

(ES) v.4 e.1, e-2, m-2, m-3

The Sky is Full of Stars. Franklyn M. Branley. Harper Trophy Publishers 1983. 40 pp. Paperback ISBN 0-06-445002-3, \$5.00. (xx)

This simple, short book describes the changes in constellations with the changes in seasons. Changes in the night sky are presented as kids go on a star party. Several notable constellations are used and the Milky Way is mentioned.

The Sun. Seymour Simon. Harper Trophy 1989. 32 pp. Paperback ISBN 0-688-09236-5, \$6.95. (6.3)

Excellent. Well worded text and excellent photos provided a complete description of the Sun including place in the Solar System, size, source of energy, layers, solar eclipse, sunspots, prominences, and flares.

ES V.4 e.1

There Is No Place Like Space. Tish Rabe. Random House 1999. 48 pp. Hardcover ISBN 0-679-89115-3, \$8.99. (3)

In Dr. Seuss style, the Cat in the Hat rhymes his way across the solar system and beyond. Accurate information and great introduction to astronomy.

ES V.4 e.1, e.2

What Makes Day and Night. Franklyn Branley. Harper Trophy Publishers 1986. 32 pp. Paperback ISBN 0-06-445050-3, \$5.00. (xx)

A simple book but excellent and correct content. Cutie animals explain how the Earth orbits the Sun, how the Earth rotates, and how the Moon orbits the Sun. Simple analogies are well done.

(ES) v.4 e.2

What's Out There? A Book About Space. Lynn Wilson. Grosset & Dunlap 1993. 32 pp. Paperback ISBN 448405172, \$3.49. (3)

A terrific little book that briefly covers many aspects of the solar system, including Sun, terrestrial planets, gas planets, phases of the moon, day/night and constellations.

(ES) v.4 e.1, e-2, m-2, m-3

When You Look Up At the Moon. Allan Fowler. Children's Press 1994. 32 pp. Paperback ISBN 0-516-46025-5, \$4.95. (xx)

A set of good photos and simple text presents the basic features of the moon, Man on the Moon, and phases of the moon. Check for error p. 23, 31.

Where are the Stars During the Day? Melvin Berger. Ideals 2001. 48 pp. Hardcover ISBN 0-8249-5319-3, \$3.95. (2.1)

Wow! With simple analogies and art this book explains why we don't see the stars in the day, relative brightness of stars, stellar distance, even an accurate description of fusion. **Great value.** Also polar stars, observing and the nature of using stars to determine season, Orion, Milky Way.

(ES) v.4 e.1, m-1, m-2, m-3

Zoo In The Sky. Jacqueline Mitton. National Geographic 1998. 26 pp. Hardcover ISBN 0-7922-7069, \$11.87. (4.4)

The **brilliant art** will capture your students' attention. The text is minimal but effective, telling about interesting stars or the season you'll see the constellation.

ES V.4 m.3

ENVIRONMENT

Mother Earth. Nancy Luenn. Aladdin 1995. 32 pp. Paperback ISBN 0689801645, \$5.99. (xx)
A caring look at the general features of our planet. Little science.

MISCELLANEOUS

Big Numbers. Edward Packard. Millbrook 2000. 32 pp. Hardcover ISBN 0761315705, \$14.95. (xx)

Little Numbers. Edward Packard. Millbrook 2000. 32 pp. Hardcover ISBN 0761313974, \$14.95. (xx)

These clever books will help your students start to grasp the big and little numbers we use to describe everything from the cosmos to atoms. Peas and a dinosaur are used as a relative scale. Fun, great contact, and well present.

How Much, How Many ... 1000. Helen Nolan & Tracy Walker. Ids Can Press 2001. 32 pp. Paperback ISBN 1550748165, \$5.95. (xx)

A fun book that uses numerous student friendly analogies to convey the value/amount of 1000.

General Science

June 29, 1999. David Wiesnar. Clarion Books 1995. 32 pp. ISBN 0-395-72767-7. \$5.95. (xx)

Excellent. A rare book that incorporates the scientific method, a school experiment, a female scientist, and extra terrestrials. **A great book.**

Kilauea, Hawaii's Most Active Volcano

This book's noble goal is marred by over simplification of text (or perhaps poor wording). Most of the content is good intended. Most photos are adequate but could be much better. The book does not highlight the rare characteristics of Hawaii volcanoes.

p. 5 "two active volcanoes", no, also Hualalai which erupted 1800-1801.

p. 6 "shoots", not always, sometimes it pours.

p. 9 crust = plates. Not true. Plate=crust + rigid mantle.

p. 9 "Many volcanoes form when plates push into each other and crack the crust." Confusing. Subduction zone? If so, where's the cracks?

p. 9 "Bubbs"

p. 9 Magma "shoots up." Much slower.

p. 9 Lava is when it reaches the surface. It could intrude the crust and not erupt.

p. 10 "Lava builds up to form rock." Huh? How about: Many eruptions build the volcano up from the ocean floor"?

p. 11 Not a very good picture.

p. 14 No, Seismoneters in Hawaii indicate where magma is moving. The text suggests earthquakes. Seismoneters record earthquakes – they cannot be used.

p. 15 “lava pool” is wrong. This is a skylight above a lava tube.

p.16 Photo of Mauna Loa summit and Mauna Kea in background does not match caption. This book needs a simple map to show location of volcanoes. Maybe profiles too.

p. 17 “Kilauea erupts almost everyday.” This is true since 1983 but can stop at anytime. Was not true for most of 1923 – 1983.

p. 17 Last four sentences are vague. Yes, Kilauea has a summit caldera (not shown in any photo). But current eruption is not at the summit caldera. It is on the rift in the flank of the volcano, an important point ignored by this text. “Many directions”, vague. Almost all to the south.

Need a guide to pronunciation?

p. 18 “erupt more and more often.” Huh? Continuous eruption fro ~1823 to 1923 versus about 25 years of eruption, 1924 – 2003.

p. 18 “2.02” watch your significant figures.

p. 19 Old eruption photo. Weak caption.

Title. Author. Illustrated by xxx. Publisher
YYYY. Xx pp. Paperback ISBN vvvvvv,
\$44.44. (readability)

Comments.
(Standards)

Rocks Hard, Soft, Smooth and Rough. Natalie
Rosinsky. Illustrated by Matthew John. Picture
Window Books. 24 pp. Hardcover ISBN 1-
4048-0015-8, \$21.26. (7.3)

Excellent. A nice bridge from the simplest rock
books towards a true understanding. Covers the
three rock types, how they form, and common
examples. Two activities, Table of Contents,
Glossary, “At the Library” and “On the Web”.
(EG-V.1 e.2, e-5)