



## Geology

*Recommended reading list for elementary, middle school, and high school teachers. These books are great resources in the classroom for teachers and would be an interesting read for students as well.*

1. TITLE: Ancient Landscapes of the Colorado Plateau  
AUTHOR: Ron Blakey and Wayne Ranney

The Colorado Plateau is one of the world's greatest showplaces of sedimentary, igneous, and metamorphic rock. The Plateau's rocky landscapes are home to the greatest concentration of National Parks and Monuments in the world. This book highlights the Plateau's magnificent present through unique views of its fascinating past. It is a ground-breaking book featuring the geology of the American Southwest in a way you've never seen it before.

2. TITLE: Basin and Range  
AUTHOR: John McPhee

This is a book of journeys through ancient terrains, enhanced by the histories of people who bring them to light. The title refers to the physiographic province of the United States that stretches from eastern Utah to eastern California, a silent world of austere beauty. These hundreds of discrete high mountain ranges are green with junipers and often white with snow, a spectacular topography that is never appreciated by people who dismiss it as "desert."

3. TITLE: The Field Guide to Geology  
AUTHORS: David Lambert and The Diagram Group

This newest edition recounts the fascinating story of the Earth in a vivid and engaging fashion. Written by a team of eminent geologists and educators, this field guide is a concise, comprehensive overview of the processes that forged the planet and the technologies that have revolutionized the way that scientists investigate Earth's systems.

4. TITLE: The Geology of Southern New Mexico  
AUTHORS: Greg H. Mack

The geology of southern New Mexico and Western Texas represents over a billion years of the earth's history. Evidence of events such as great volcanic eruptions, uplift and erosion of ancient mountains, and deposition of sediment in subtropical seas is available for those who know how to read the rocks. This guide for the amateur geologist not only provides the necessary background for understanding how formations occurred but also offers a guide to local features.

5. TITLE: Pages of Stone: Geology of Western National Parks and Monuments  
AUTHOR: Halka Chronic

With this handy non-technical guide, the hiker and car-traveler can go on a fascinating geologic tour through three national parks and 13 national monuments to "read" the desert storybook. Presented in this book are caverns etched from limestone, cliff dwellings, gypsum dunes, fossil reefs, volcanoes, and canyons.

6. TITLE: The Practical Geologist  
AUTHOR: Dougal Dixon

Beginning with a history of the earth's formation and development, *The Practical Geologist* explores the substances that compose the planet, movements within the earth, the surface effects of weather and water, and underground landscapes.

7. TITLE: Valles Caldera: A Geologic History  
AUTHOR: Fraser Goff

The Valles Caldera consists of a twelve mile wide collapsed volcanic crater and more than ten post-collapse volcanic domes in New Mexico's Jemez Mountains. For over a century, it was safeguarded within the 89,000 acre Baca Ranch. In the year 2000, Congress established the Valles Caldera Trust to purchase the ranch and help develop the Valles Caldera National Preserve. Fraser Goff collaborated with the Valles Caldera Trust to provide an accessible scientific overview of the caldera's geologic wonders.

8. TITLE : Roadside Geology of New Mexico  
AUTHORS: Halka Chronic

This book is designed especially, though not exclusively, for readers with little or no geologic training, for those curious about the world around them eager for answers to apparent enigmas. This edition of *Roadside Geology* begins by telling of geology in general, with emphasis on New Mexico's own geologic story. Each subsequent chapter starts with a rundown of the geology of one subdivision of the state, and is designed to be read before traveling among any individual highway segment in that chapter.

9. TITLE: Environmental Geology and Hydrology in New Mexico  
AUTHOR: Wayne Lambert, Jonathan F. Callendar, and Stephen G. Wells

*Environmental Geology and Hydrology in New Mexico* discusses human interactions with the hydrologic environment, energy-mineral development within that environment, and hazardous waste disposal in New Mexico.

10. TITLE: Traces of a Permian Seacoast: Prehistoric Trackways National Monument  
AUTHOR: New Mexico Museum of Natural History and Science and Bureau of Land Management USDOI

In 2009, an act of the United States Congress created the Prehistoric Trackways National Monument, approximately 5,200 acres located in the Robledo Mountains of Dona Ana County in southern New Mexico. The legislation endorsed the conclusion of paleontologists that, included in the monument, are the most scientifically significant Permian tracksites in the world. This book explains this significance and provides background on the area's unique geology.

11. TITLE: New Mexico Bureau of Geology and Mineral Resources  
AUTHOR: New Mexico Bureau of Geology and Mineral Resources

The New Mexico Bureau of Geology and Mineral Resources, established by legislation in 1927, is a service and research division of the New Mexico Institute of Mining and Technology. This book gives a general geology about the Tularosa Basin, gypsum, wind transportation, and the San Andres Mountains.

12. TITLE: 101 Questions About Desert Life  
AUTHOR: Alice Jablonsky

This book, geared toward children from fourth through eighth grade, answers 101 fantastic questions about the desert. This fun book is as informational as it is entertaining.

13. TITLE: Earthsteps: A Rock's Journey Through Time  
AUTHOR: Diane Nelson Spickert

This children's book, best for Kindergarten through third grade, is an engaging and educational picture book which takes readers on one rock's geological odyssey through time. Vivid, full-color illustrations and a detailed timescale of a rock's journey teaches students about earth science and the geological cycle.

14. TITLE: Geology and Water Resources of Tularosa Basin, New Mexico  
AUTHOR: Oscar Edward Menizer

Author Oscar Menizer has developed a text vital to understanding the geology and water systems of the Tularosa Basin. With descriptions of his various methods of analysis, different water conditions, and geologic formations in the area, readers are sure to gain a greater understanding of this unique region in Southern New Mexico.

15. TITLE: Geology of the Southwest: Investigate How the Earth was Formed  
AUTHOR: Cynthia Light Brown

Designed for children ages nine through twelve, students will learn how geology and physical geography are intertwined as they explore the unique setting of the desert southwest.

16. TITLE: The Wild, Wild Southwest  
AUTHOR: Jeff Corwin

Author Jeff Corwin, who is an Emmy award-winning TV star and wildlife biologist, takes the Baxter kids camping and exploring in the desert. They go on a family vacation and this year Benjamin and Lucy are camping in New Mexico and exploring the wild life of the southwest. But will multi-legged critters and rain threaten their fun? Not for the Baxters. Nothing will stop these kids from exploring their surroundings and discovering the fascinating plants and animals of the southwest.

17. TITLE: Correctamundo: Prickly Pete's Guide to Desert Facts and Cactifracts  
AUTHOR: David Lazaroff

The author introduces youngsters to Prickly Pete, a packrat with a stylish hat. Prickly Pete grew up in the desert but only he knows exactly where. If you go exploring in the desert look for his house. It's the one with the space captain action figure on the roof. Prickly Pete has never been in a book before but once, before he knew better, he chewed on one. Children will love learning the casual information and answers from Prickly Pete.

18. TITLE: 101 American Geo-Sites You've Gotta See  
AUTHOR: Albert B Dickas

Rocks racing across the land in Death Valley, perfectly preserved thirty-six million year old tsetse flies in Colorado, dinosaur trackways cemented into ancient flood planes in Connecticut, a gaping rift in the Idaho desert. What do these enigmatic geologic phenomena have in common? Besides initiating a profusion of head-scratching over the years these sites of geologic wonder appear side by side, for the first time, in a single publication.

19. TITLE: National Parks: A Kid's Guide to America's Parks, Monuments, and Landmarks  
AUTHOR: Erin McHugh

From Yellowstone to the Statue of Liberty, from Gettysburg National Battlefield to Mount Rushmore National Monument, *National Parks* highlights the beauty and diversity of America's national parks, monuments, and landmarks in a fun-filled, entertaining book.

20. TITLE: The Geologic Story of the National Parks and Monuments: Fourth Edition  
AUTHOR: David V. Harris and Eugene P. Kiver

This book is written for all those who want to know what lies behind the magnificent scenery in our country's national treasures. There are a number of new and exciting parklands as well as old favorites. Also, mentioned are national seashores like Point Reyes, Cape Hatteras, and Cape Cod National Monument. All are interpreted in accordance with the modern geologic theory of Plate Tectonics. To assist readers with limited geologic background, the author provides an easy-to-understand synopsis of geologic principles and processes in the introduction.

21. TITLE: Geology Of Organ Mountains and Southern San Andres Mountains New Mexico  
AUTHOR: New Mexico of Mines and Mineral Resources

This book summarizes the geologic history of both the Organ and San Sndres mountain ranges. The authors provide descriptions of related rocks and structures together and include fascinating geologic features, such as volcanic rocks and cauldrons, mineral deposits, and the Late Tertiary formation. This book provides students and teachers alike with a detailed look into southern New Mexico's geologic past.

22. TITLE: Geology of the Sacramento Mountains Escarpment, Otero County, New Mexico  
AUTHOR: New Mexico Bureau of Mines and Mineral Resources

The Sacramento Mountains are essentially a cuesta with a bold, west-facing escarpment and a total relief of more than a mile. The gentle east slope of the Sacramento Mountains extends to the Pecos River, a distance of 80 miles from the crest. Exposed along the steep western escarpment is a thick section of sedimentary rocks that range in age from Precambrian to Cretaceous. Most of the sedimentary units are of Paleozoic age, and it is this that forms the prime focus of geologic studies in the Sacramento Mountains. A variety of structural features, minor igneous intrusive rocks, and landforms add further interest to the geology of the Sacramento Mountains escarpment.

23. TITLE: Geology of Our Western National Parks and Monuments  
AUTHOR: Royle C. Rowe

Royle C. Rowe, a noted teacher-geologist, presents a comprehensive, up-to-date guide book for the general reader who is looking for more detailed information than is typically available in pamphlet literature. Many of the photographs are the result of his travels, which have taken him to most of the parks and monuments, where he has seen first-hand the scenic and scientific marvels he describes. All park and monument areas are included and grouped according to state for easy reference. For readers who wish for additional information on types of rocks and the geologic divisions, there is an excellent illustrated section.

24. TITLE: Geology of United States Parklands: Fifth Edition  
AUTHOR: Eugene P Kiver and David V. Harris

The purpose of this book is to provide you with the knowledge you need to read and interpret the story of each National Park and to make your visit to the parklands even more special. Requiring no prior familiarity with the geological sciences, this region-by-region exploration of the United States parklands teaches the principles of physical and historical geology by example. It begins with a general introduction to all important concepts, terms, and principles. The author takes you on a tour through the geological regions of the United States. Lavishly illustrated with nearly 300 stunning photographs and maps, this book features greatly expanded coverage of the geological story, history, and culture of United States parks and monuments. This newest edition of Dr. David Harris' classic text is an ideal introduction to the principles of geology for students and nature enthusiasts alike.

25. TITLE: The Physics of Blown Sand and Desert Dunes  
AUTHOR: A. Bagnold, F.R.S.

In this book, Bagnold attempts to explain some of the many strange phenomena produced by the natural movement of sand over the dry land on Earth. Utilizing experimental physics, this book tackles a topic that no one branch of science has dealt with in entirety.

26. TITLE: Reading the Earth: Landforms in the Making  
AUTHOR: Jerome Wykoff

Wykoff presents a comprehensive, plainly written, and richly-illustrated guide to landforms for general readers. Mountains, volcanoes, rivers, glaciers, plains, and plateaus - all these and hundreds of associated features likely to be seen anywhere in the world are described concisely and illustrated with 556 photographs and 75 drawings. The index, with its 6,000 entries, makes information easy to find. This book is ideal for all who enjoy natural scenery and wonder how it was made.

27. TITLE: A Study of Global Sand Seas: Geological Survey Professional Paper 1052  
AUTHOR: Edwin D. McKee

A major feature of this report on global sand seas is the compilation and comparison of available data based on many different methods of investigation. Evidence at one extreme is obtained from the detailed studies of minute particles and from analysis of individual grains. At the opposite extreme is evidence obtained from remote sensing, in which dune patterns, recorded from approximately 500 miles in space, are compared from one sand sea to another. Furthermore, comparisons are made between ancient and modern deposits with respect to textures, structures, and other characteristics. Criteria for recognizing the eolian origin of various ancient deposits are discussed. The application of these studies to economic problems illustrates the importance of eolian deposits to our present culture and human welfare.