

## Earth Science

### Resource List for Grades 5 through 8

The Resources in this document can be used with the Earth Science Curriculum Packet for grades 5 through 8.

#### Books

##### Non-fiction and Biography

- Basher Science: Planet Earth: What planet are you on? 2010 by Simon Basher (Author, Illustrator), Dan Gilpin (Author).  
Planet Earth is a book that sheds light on this rock we live on, from its mountains and ocean depths to the storms that whirl around it.
- Earth Science Fair Projects (Earth Science Projects Using the Scientific Method), 2010 by Yael Calhoun (Author).  
Earth science has so many fun topics to explore, and this book is the best place to start understanding geology. Young scientists will learn about the Earth's layers, understand the forces that change our planet's surface, and explore how rocks, minerals, and crystals form.
- Exploring Caves: Journeys into the Earth, 2001 by Nancy Holler Aulenbach (Author).  
Two veteran cavers, accompanied by an IMAX film crew, guide readers through subterranean adventures in three different kinds of caves: the ice caves of Greenland, underwater caves on Mexico's Yucatan Peninsula, and terrestrial caves in the United States.
- Janice VanCleave's Earth Science for Every Kid: 101 Easy Experiments that Really Work, 1991 by Janice VanCleave (Author).  
The easy experiments are carefully organized in sections dealing with the Earth in space, rocks and minerals, crustal movement, erosion, atmosphere, weather, and the oceans. Each experiment includes a purpose, a list of needed materials, step-by-step instructions, expected results, and a scientific explanation of the results.
- The Lost Art of Reading Nature's Signs: Use Outdoor Clues to Find Your Way, Predict the Weather, Locate Water, Track Animals—and Other Forgotten Skills, 2015 by Tristan Gooley (Author).  
Whether you're walking in the country or city, along a coastline, or by night, this is the ultimate resource on what the land, sun, moon, stars, plants, animals, and clouds can reveal, if you know how to look!
- Natural History: The Ultimate Visual Guide to Everything on Earth (Smithsonian), 2010 by DK (Author).  
Natural History presents an unrivaled visual survey of Earth's natural history. It gives a clear overview of the classification of our natural world (over 6,000 species) and looks at every kingdom of life, from bacteria, minerals, and rocks to fossils to plants and animals.

- Peeling the Earth Like an Onion: Earth Composition, 2017 by Baby Professor (Author). Did you know that the Earth has many layers? These layers make it possible for Earth, and everything in it, to thrive.
- Seismology: Our Violent Earth, 2015 by Roberta Baxter (Author). This book traces the history of the field of seismology, examining the ideas about earth processes that developed over time to produce current theories within the field, and ending with contemporary challenges and predictions for the future.
- Super Earth Encyclopedia, 2017 by DK (Author). A visual encyclopedia that showcases the most amazing things about our planet as kids have never seen them before with mind-blowing photography, brand-new CGI artworks, and incredible facts and stats.
- Under Water, Under Earth, 2016 by Aleksandra Mizielinska (Author), Daniel Mizielinski (Author). Dive below the surface and find out what happens under earth and under sea, from early submarines and deep-sea life to burrowing animals and man-made tunnels.
- The Wonderous Workings of Planet Earth, 2018 by Rachel Ignatofsky (Author). This book explains how our planet works, and how we can protect it, from its diverse ecosystems and their inhabitants, to the levels of ecology, the importance of biodiversity, the cycles of nature, and more.

## Fiction

- Flashback Four #3: The Pompeii Disaster, 2018 by Dan Gutman (Author). The Flashback Four are headed to AD 79 to photograph the eruption of Mount Vesuvius! Can they get their photo and get back home before they become ancient history? With real photographs from Pompeii to help put readers right in the action, plus back matter that separates fact from fiction, The Pompeii Disaster tells the story of one of the world's most devastating natural disasters like you've never seen it before.
- I Survived the Eruption of Mount St. Helens, 1980, 2016 by Lauren Tarshis (Author). Eleven-year-old Jessie Marlowe has grown up with the beautiful Mount St. Helens always in the background. She's hiked its trails, dived into its lakes, and fished for trout in its streams. Of course, she knew the mountain was a volcano, but not the kind of volcano that could destroy and kill!
- I Survived the Japanese Tsunami, 2011, 2013 by Lauren Tarshis (Author). Visiting his dad's hometown in Japan four months after his father's death would be hard enough for Ben. But one morning the pain turns to fear: first, a massive earthquake rocks the quiet coastal village, nearly toppling his uncle's house. Then the ocean waters rise, and Ben and his family are swept away-and pulled apart-by a terrible tsunami.
- Samantha Hansen Has Rocks in Her Head, 2008 by Nancy Viau (Author). Samantha loves studying rocks, so when her mother announces that she is taking Sam and her 15-year-old sister on a vacation to the Grand Canyon, she is in heaven.
- Science Comics: Volcanoes: Fire and Life, 2016 by Jon Chad (Author, Illustrator). In this graphic novel set during a future ice age, a child stumbles upon a book about volcanoes and uses her new knowledge to bring Earth's heat to her people.

## Magazines, Journals, Miscellaneous

- Earth by Kids Discover  
How did life evolve on Earth? Why did the dinosaurs die out? These and other basic questions about our planet are answered in Earth. This issue investigates the composition of our planet and the intricate relationship between living things and their environment. The Earth is also brought to life with fun diagrams and projects like erosion tests.  
<https://www.kidsdiscover.com/shop/issues/earth-for-kids/>
- Earthquakes by Kids Discover  
Our planet certainly does like to shake, rattle, and roll! Here you get the inside story on the biggest, the baddest, and the wettest earthquakes of all time, including the Anchorage ripper of 1964 and San Francisco's "Great Quake" of 1906.  
<https://www.kidsdiscover.com/shop/issues/earthquakes-for-kids/>
- Smithsonian Earth: Smithsonian Earth is a digital streaming service with original documentaries that bring you closer to nature's most fascinating animals and wildest locations. After a 30-day free trial, a subscription to Smithsonian Earth is \$3.99/month.  
<https://smithsonianearthtv.com/>
- Volcanoes by Kids Discover  
What natural occurrence can transform a landscape in minutes and affect the global climate for years? Volcanoes, of course. Get down to the nitty-gritty with these explosive phenomena, which can blow the tops off mountains and flatten forests, as well as build islands in the space of days.  
<https://www.kidsdiscover.com/shop/issues/volcanoes-for-kids/>

## Online Links

- Exploratorium: Science Museum for Kids  
<https://www.exploratorium.edu/explore/earth-ocean-atmosphere>
- Smithsonian Museum of Natural History: From dinosaur exhibits to displays of rare gems, this acclaimed museum celebrates the natural world.  
<https://naturalhistory.si.edu/>

## Background information for the Educator

- The Importance of Teaching Earth Science: Article in Teach Magazine  
<http://teachmag.com/archives/10545>
- Teacher Vision: Teaching Earth Science  
<https://www.teachervision.com/subjects/science/earth-science>