Websites
4th Grade - Earth Processes

A Stream Table Makes a Miniature Stream
http://www.watersheds.org/earth/streamtable.htm
2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Teacher Background
This site has some nice photos of different river formations modeled in the stream table and real life. Has good vocabulary links.

Bay Area Geology
http://lpc1.clpccd.cc.ca.us/lpc/hanna/locllinks.htm
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Background
Links to Bay Area and California geology information websites and maps, including one that maps the relative seismic shaking in different parts of the bay area. Also includes earthquake resources.

Brain Pop - Mountain Types
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Student Online Activities;Teacher Background
Animated video of the different kinds of mountains and how they are formed.

Challenger Center for Space Science Education
https://www.challenger.org/stem-resources/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Online Activities;Teacher Activities
Using space exploration as a theme, the Challenger Center web site offers a large searchable database of hands-on lessons related to the solar system and earth sciences, as well as podcasts, webcasts and interdisciplinary design challenges to do in your classroom.

Composting in Schools
http://compost.css.cornell.edu/schools.html
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Activities;Teacher Background
Includes information under: Why Composting? • Teacher's Page • Ideas for Student Research Projects • Compost Quiz • Science and Engineering • Composting Indoors • Composting Outdoors • Weird and Unusual Composting • Frequently Asked Questions • Glossary

Disappearing Water
https://eduref.org/lessons/science
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Activities
Science lessons at every grade level and topic
Engineering Everywhere is a FREE engineering curriculum for elementary level students. Choose from seven units with fun, hands-on engineering design challenges based on real events around the world.

EPA Ecosystems Teaching Resources
https://www.epa.gov/students.lesson-plans-teacher-guides-and-online-environmental-resources-educators
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background; Student Online Activities; Teacher Activities; Teacher Background
links to a wide variety of teaching resources; curriculum and lesson plans; on-line data projects, etc.

Green Schoolyard Resource Directory
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Background
Green Schoolyard Resource Directory for the San Francisco Bay Area For schools, parents, teachers, students, designers, and community members in San Francisco and around the Bay Area.

Growing Minds - Farm to School
http://growing-minds.org/lesson-plans/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background; Teacher Activities; Teacher Background
This site has a nice selection of activities and resources about how to create and use a school garden and its bounty.

Hayward Fault: Predictable Peril
http://science.kqed.org/quest/video/the-hayward-fault-predictable-peril/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background; Teacher Background
11 minute video from KQED QUEST on the 1868 Hayward Earthquake. Good history connections and the basics about how earthquakes happen.

HowToSmile.org
http://howtosmile.org/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Activities; Teacher Background; Teacher Videos
Are you looking for new ways to teach kids about math and science? Do you want activities that meet you where you live, whether your "classroom" is an active volcano, the shark tank at the local aquarium, or your own kitchen table? You’ve come to the right place. SMILE is collecting the best educational materials on the web and creating learning activities, tools, and services – all designed especially for those who teach school-aged kids in non-classroom settings. We are a group of science museums dedicated to bringing science, technology, engineering, and math (STEM) out of the academic cloister and into the wider world. Our organizations are resource hubs for educational programs that involve people of all ages and backgrounds. Together we’re gathering the best STEM education materials from the web, and encouraging educators to both use and contribute to the growing collection.

K-12 Soil Science Teacher Resources
http://www.soils4teachers.org/home
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Activities; Teacher Background
Online resources from the Soil Science Society of America. Includes links to lesson plans, background information about the science of soil, connections between the land and people, soils around the world and more.

My Garbology
http://www.naturebridge.org/garbology
K;1st;2nd;3rd;4th;5th
Website Type: Student Background;Student Online Activities;Teacher Activities
Website is designed Naturebridge to introduce the ins and outs or recycling and composting. Online games for students and lesson ideas for teachers

NASA Wavelength
http://nasawavelength.org/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Teacher Activities;Teacher Background
NASA Wavelength is your pathway into a digital collection of Earth and space science resources for educators of all levels – from elementary to college, to out-of-school programs. These resources, developed through funding of the NASA Science Mission Directorate (SMD), have undergone a peer-review process through which educators and scientists ensure the content is accurate and useful in an educational setting. Use NASA Wavelength to quickly and easily locate resources, connect them to other websites using atom feeds, and even share the resources you discover with others through social media and email.

National Geographic - Volcano
K;1st;2nd;3rd;4th;5th
Website Type: Student Background;Teacher Background
National Geographic has lots of images and background information on volcanoes. Free registration is required to access all their information.

National Geographic Xpeditions
http://education.nationalgeographic.com/education/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Student Online Activities;Teacher Activities;Teacher Background
Activities and lesson plans are sorted by grade and geography standard, and relate to different science standards. Free Xpeditions Atlas has hundreds of black-line masters optimized for overhead transparencies, activities, lesson plans, and student reports. Parents: Visit 'For Parents' section of site.

National Science Digital Library
http://nsdl.org/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Online Activities;Teacher Activities;Teacher Background
This website is a huge resource for finding activity ideas, videos, photos and news about science and technology. They have a section specifically devoted to K-12 teachers.

Photos of Sand from Different CA Beaches
http://www.coastal.ca.gov/publiced/sand/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Teacher Background
Photos of Sand from Different CA Beaches and others from around the world. Allows you to see scale of size of grains and diversity of rock types
This virtual fieldtrip of Mt. Diablo State Park is a nice introduction to the geology and habitat of the park. It would be a good pre-fieldtrip activity.

Science and Nature Videos from Hidden Villa
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Videos;Teacher Videos
To assist educators in teaching science concepts we have developed 30 short videos that can help build students' life science knowledge and retention. Each video is a demonstration of a standard from the new NEXT GENERATION SCIENCE STANDARDS, but you can use them right now with your current curriculum. Teachers can use these short videos to:
* Introduce a concept
* Get students excited to learn about science
* Stimulate class discussion and exploration
* Show students real world examples

Science for Kids - Geography
http://www.sciencekids.co.nz/geography.html
K;1st;2nd;3rd;4th;5th
Website Type: Student Background;Student Online Activities;Teacher Activities;Teacher Background;Student Videos;
The Geography page on Science for Kids has games, experiments, images, videos, facts, lessons and activities on subjects such as weather, volcanoes, earthquakes, rocks, fossils.
For videos go to http://www.sciencekids.co.nz/videos/earth.html

Scientists @ the Smithsonian
http://www.smithsonianeducation.org/scientist/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Teacher Background
Scientists aren't just nerds who wear lab coats. All kinds of people become scientists. And scientists do all kinds of things. Watch and read about these scientists at the Smithsonian. What kind of scientist would you like to be?

Spark - Weather and Atmospheric Science Classroom Activities
https://spark.ucar.edu/activities
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background;Student Online Activities;Teacher Activities;Teacher Background;Worksheets;Teacher Background
Website includes K-12 classroom activities for the following topics: Weather, Climate Change, Sun-Earth Connections, and Atmosphere and Chemistry.
Spark engages people in the wonder and relevance of science. We focus on scientific literacy, workforce development, and community engagement. Our overarching goal of this plan is to make an impact on public understanding of atmospheric science concepts and process. Atmospheric and related sciences includes not only sciences associated with advancing understanding of the Earth--Sun system, but also the computational and engineering sciences and technology that afford those advances.

The Adventures of Herman
http://www.urbanext.uiuc.edu/worms/index.html
K;1st;2nd;3rd;4th;5th;6th;7th;8th
Website Type: Student Background;Student Online Activities;Teacher Activities;Teacher Background
Has audio in both English and Spanish that allows the site to be used by younger students. Squirming Herman the Worm teaches students all about worms and how to make their own worm bin in this new interactive curriculum. The Teacher guide section of the website has good ideas about activities with insects for the classroom.

University of California Berkeley Library Digital Image Finder
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Activities; Teacher Background
Use this site to find images from a myriad of topics.

USGS Learning Web
http://education.usgs.gov/common/primary.htm
K;1st;2nd;3rd;4th;5th;6th
Website Type: Student Background; Teacher Activities; Teacher Background
Includes Lesson Plans and Activities, Paper Models, and Educational Materials in topic areas such as the Changing World, Volcanoes, Working with Maps, Earth Hazards, Earthquake Effects, and Helping Your Child Learn Geography. Also has maps and rock images, and real-time information.

Using a Stream Table to Investigate Erosion Control
2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Activities; Teacher Background
Lesson on modeling erosion using a stream table.

WatchKnowLearn.org
http://www.watchknowlearn.org/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background; Teacher Background; Student Videos; Teacher Videos
This website has free educational videos on all topics (including science) for all age levels. There is specifically a section for younger learners.

Windows to the Universe
http://www.windows2universe.org/
2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background; Student Online Activities; Teacher Activities; Teacher Background
Extensive website of all areas of earth science. Lots of nice images. Games, worksheets and puzzles. Some real data on atmospheric science. You can use the free version with advertizements scrolling at top or sign up for membership with no advertizements.

Worm Digest
http://www.wormdigest.org
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Student Background; Teacher Background
How earthworms are used in waste management and sustainable agriculture. Current information and valuable resources for individuals, communities, businesses or educators, who are interested in learning more about worms and vermiculture.

Worm Man Wormfarm
http://www.wormman.com/
K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Website Type: Teacher Background
You can purchase worm books, worm bins and worms from a real worm farm. They also sell educational kits that show, for example, how to recycle organic kitchen waste into nutrient-rich garden fertilizer.