Internet Resources for Teachers
from
Center for Earthquake Research and Information

There is no guarantee that information contained in this list or to its links is accurate. It was compiled to provide teachers with ideas and ready-to-use lesson plans related to earthquakes and plate tectonics.
To offer suggestions for this list, e-mail mdry@memphis.edu.

Lesson Plans for Grades K-12

The Active Earth (Grades 3-5)
http://www.nationalgeographic.com/xpeditions/lessons/07/g35/earth.html

Aftershocks Continue to Rock India (Grades 9-12)
http://images.cnn.com/2001/fyi/lesson.plans/01/30/india.quake.2/

Aftershocks in El Salvador (Grades 9-12)

Big Trouble in Earthquake Country (Grades 9-12)
http://www. lhs.berkeley.edu/SII/SII-eqcountry/5eqcountry.homepage.html

Birth of the Earth (Grades 6-8)
http://school.discovery.com/lessonplans/programs/birthofearth/

Building a Model to Withstand an Earthquake (Grades 4-8)
http://www.pbs.org/wgbh/nova/teachers/activities/2302_shook.html

Candy Quakes (Grade 8)
http://www.uen.org/Lessonplan/preview.cgi?LPid=1113

The Changing Earth (Grades 3-4)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Geology/GLG0002.html

Constructing Earthquake-Resistant Buildings (Grades K-12)
http://www.pbs.org/wgbh/nova/teachers/activities/2116_killerqu.html

Constructing Earthquake-Resistant Buildings (Grades 6-8)
http://school.discovery.com/lessonplans/programs/earthquakeproof/

Continental Drift (Grades 6-8)
Core of the Earth (Grade 8)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Geology/GLG0006.html

Core Sampling with Cupcakes (Grades 5-8)
http://nesen.unl.edu/lessons/geology/coresamples.html

Creating a Seafloor Diagram (Grades K-12)

Cupcake Core Sampling (Grades K-12)
http://www.coaleducation.org/lessons/lesson.htm

Designing Structures to Perform Well During an Earthquake (Grades K-12)
http://mceer.buffalo.edu/education/exercises/struct.asp

Designing Structures to Withstand Earthquakes (Grades 2-10)

Does the Earth Have the Shakes?

Dynamic Earth (Grades K-5)
http://school.discovery.com/lessonplans/programs/dynamicearth/

The Dynamic Earth (Grades 3-8)
http://www.wnet.org/wnetschool/origlessons/dynamic_earth/index.html

The Earth Bowl (Grades K-3)
http://sln.fi.edu/tfi/activity/earth/earth-1.html
(Layers of the earth in a see-through bowl.)

Earth Changes (Grades 4-6)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Geology/GLG0008.html

Earthquake Activities (Grades K-8)
http://quake.ualr.edu/schools/elem.htm

Earthquake Activities (Grades 7-12)
http://tremor.nmt.edu/activities.htm

Earthquake Activities (Grades K-12)
http://web.ics.purdue.edu/~hborcher/EAS%20102%20APT/earthquake.html

Earthquake Country Unit (Grades 4-7)
http://www.mountainlake.org/ed/local/quake.htm

Earthquake Depth (Grades 9-12)
http://btc.montana.edu/nten/trc/default.shtml

Earthquake Epicenters and Magnitudes (Grades 4-12)
http://btc.montana.edu/nten/trc/default.shtml

Earthquake Experiments from FEMA (Grades K-8)
http://www.fema.gov/kids/jessnsam/
Earthquake Internet Scavenger Hunt
http://www.brookscole.com/earthscience_d/special_features/scavenger.html

Earthquake Lesson Plans (Grades K-12)
http://visearth.ucsd.edu/VisE_teach/

Earthquakes! (Grades 6-8)
http://cse.ssl.berkeley.edu/lessons/indiv/davis/hs/QuakesEng3.html

Earthquakes (Grade 5)
http://www.uen.org/Lessonplan/preview.cgi?LPid=2696

Earthquakes and the Behavior of Earth Materials (Grades K-3)
http://www.owu.edu/~mggrote/pp/geology/c_earthquakes.html

Earthquakes: Causes and Effects (Grade 4)
http://www.learnnc.org/LearnNC/lessonop.nsf/docunid/136E3FC93ACCDDA98525

Earthquakes, Faults and Moving Plates Using Food and Candy (Grades 4-8)
http://www.rit.edu/~7Ecomets/pages/lessonplans/earthquakes.html

Earthquakes: Get Ready for the Big One (Grades 6-8)
http://www.summerproductions.com/earthworks/quakes/resources.html

Earthquakes: Getting Ready for the Big One (Grades 6-8)
http://school.discovery.com/lessonplans/programs/earthquakes-gettingready/

Earthquakes: Learn from the Past, Prepare for the Future (Grades 9-12)
http://school.discovery.com/lessonplans/programs/earthquakes/

Earthquake Slip: A Classroom Exercise (Grades 7-9, but can be adapted)

Earthquakes, Plate Tectonics and Volcanoes (Grades 7-12)
http://www.glencoe.com/sec/science/search/searchVoyages.php4

Earthquakes Theme Page (links to lessons)
http://www.cln.org/themes/earthquakes.html#top

Earthquakes and Volcanoes (Grades 3-5)
http://www.nationalgeographic.com/xpeditions/lessons/15/g35/earthquakes.html

Earthquakes and Volcanoes (Grade 6)
http://www.sasked.gov.sk.ca/docs/midlsci/gr6ubmsc.html

Earthquakes and Volcanoes (Grades 6-12)
http://etc.sccoe.org/i2000/Equakes1.html

Earthquakes WebQuest (Grades 5-8)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Geology/GLG0035.html

Earthquakes: “What About Me?” (Grade 3)
http://www.uen.org/cgi-bin/websql/lessons/l4.hts?id104
Earthquake Waves and Their Destrucitons: 7 Activities (Grades 7-12)
http://www.iit.edu/~smile/ph9309.html

Earth Science Lessons: Plate Tectonics, Earthquakes, Volcanoes, Prehistoric Earth (Grades 5-8)
http://volcano.und.nodak.edu/vvdocs/vvlessons/lessons/lesson.html

Earth Science Activities from a USGS Scientist
http://www.jjlahr.com/science/earth_science/

Earth Science (Grades K-12)

Earth Science (Grade 10)
http://www.bced.gov.bc.ca/irp/science810/10earsp.htm

Earth Science and Geology Lesson Plans (Grades 11-12)
http://www.bced.gov.bc.ca/irp/esg/esgtoc.htm

Earth’s Dramatic History (Grades 6-8)
http://school.discovery.com/lessonplans/programs/earthspast/

Earth’s Interior and Plate Tectonics Theory (Grades 5-6)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Earth_Science/EAR0203.html

Edible Four-Layer Earth (Grades K-8)
http://www.sd5.k12.mt.us/glaciereft/geoeatk8.htm

Edible Rock Layers (includes faulting) (Grades 5-8)
http://www.coaleducation.org/lessons/lesson.htm

Finding an Earthquake’s Epicenter (Grades 9-12)
http://www.educationworld.com/a_tsl/archives/02-1/lesson001.shtml

Geologic Time (Grades 5-8)
http://www.geol.vt.edu/vesr/gtu.html

Geologic Time (Grades 7-12)
http://nesen.unl.edu/lessons/geology/journey_2.htm

Geological Time and the Evolution of the Earth (K-3)
http://www.owu.edu/~mggrote/pp/geology/c_geological.html

Geologic Time: Relative and Absolute Dating (Grades 9-12)
http://btc.montana.edu/nten/trc/default.shtml

Geological Timeline (Grades 3-8)
http://www.coaleducation.org/lessons/primary/geol/geotim.htm

Great Continental Drift Mystery
http://www.yale.edu/ynhti/curriculum/units/1991/6/91.06.05.x.html

The Great San Francisco Earthquake of 1906 (Grades 5 and up)
http://www.teacherhelp.com/your_classroom/lesson_plans/lessonpln2.html
The Impact of Natural Hazards Around the World (Grades 6-8)
http://www.nationalgeographic.com/xpeditions/lessons/15/g68/hazards.html

Interactive Online Earthquake Lesson Plan (Grades 9-12)
http://www.wnet.org/edonline/concept2class/month2/lp_hs_intro.html

Kobe, Japan Earthquake Report (Grades 5-9)
http://inspire.ospi.wednet.edu:8001/curric/land/kobett.html

Layer Cake Core Drilling (K-12)
http://www.coaleducation.org/lessons/lesson.htm

Layers of the Earth (Grades 2-3)
http://www.coaleducation.org/lessons/sme/elem/2.htm

Layers of the Earth (Grades 2-3)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Geology/GLG0051.html

Layers of the Earth (Grades 2-6)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Geology/GLG0011.html

Learn from the Past, Prepare for the Future
http://www.teachers.yourhomework.com/hanchon/intro_earthqk_discoverychannel_plan.htm

The Living Earth (Grades 3-5) Glaciers and other natural forces that shape the Earth.
http://school.discovery.com/lessonplans/programs/livingearth/

Making a Shake Table (Grades 7-12)
http://mceer.buffalo.edu/education/exercises/shtable.asp

Mapping Earthquakes, Earthquake Depth and Earthquake Magnitude (Grades 7-12)
http://atlas.geo.cornell.edu/education/instructor/earthquakes/index.html

Mid-America Earthquake Center Education Program: Lessons and Activities (Grades K-12)
http://mae.ce.uiuc.edu/Education/Teachers/resource.htm

A Model of Sea-Floor Spreading (Grades 7-12)
http://www.ucmp.berkeley.edu/fosrec/Metzger3.html

A Model of Three Faults (Grades 7-12)

Moving the Earth (Grade 5)
http://www.uen.org/Lessonplan/preview?LPid=2192

Musical Plates (Grades 4-12)
http://k12science.ati.stevens-tech.edu/curriculum/musicalplates2/index.shtml

Natural Frequency of Buildings (Grades 7-12)
http://www.geo.arizona.edu/K-12/teachers/chriskaus/FREQTEXT.HTML

Online Earthquake Lesson (Grades 4-8)
http://www.uen.org/utahlink/activities/view_activity.cgi?activity_id=6985
Pangea “All Lands” (Grades 4-6)
http://www.sd5.k12.mt.us/glaciereft/pangea.htm

Peanut Butter and Jelly Sandwich Faults (Grades 3-5)
http://web.ics.purdue.edu/~wines/60minutetelesson.html

Plate Tectonics: 10 Activities
http://www.iit.edu/~smile/ph9312.html

Plate Tectonics and Earthquakes (Grade 6)

Plate Tectonics and Snickers (Grades 5-8)
http://sciencespot.net/Pages/classearth.html#Anchor3

Plate Tectonics and the Surface of the Earth (Grades K-3)
http://www.owu.edu/~mggrote/pp/geology/c_plate.html

Plate Tectonics Units Covering Earthquakes, Volcanoes and Hazards (Grades K-6)

Plate Tectonics with an Orange (Grades K-12)
http://www.coaleducation.org/lessons/lesson.htm

Plate Tectonics Unit (Grade 6)
http://etc.sccoe.org/i2000/tecton.htm

Plate Tectonics Using Clay (Grades 5-9)
http://leapnyc.org/lessonplans/sampleplan/Sample1_/sample1_.html

Prepare Yourself for Natural Hazards (Grades K-2)

The Relationship Between Earthquakes and Plate Boundaries (Grades 4-9)
http://btc.montana.edu/nten/trc/default.shtml

Researching Geologic Time in Pairs (Grades 7-12)
http://nesen.unl.edu/lessons/geology/journey_2.htm

Rock and Roll: Earthquake-Resistant Homes (Grades 5-8)
http://sciencespot.net/Pages/classearth.html#Anchor-49575

Seismology Lessons from Prof. Larry Braile (Grades 5-12)
http://www.eas.purdue.edu/~braile/

Seismology Lessons from Indiana University (Grades 7-12)
http://www.indiana.edu/~pepp/

Shake, Rattle and Erupt: A Unit on Plate Tectonics, Earthquakes and Volcanoes (Grades 5-8)

Shake, Rattle, and Liquefy (Grades 6-10)
http://www.wa.gov/dnr/hidocs/ger/earthcon.htm
Shake, Rattle and Roll (Grades 5-8)
http://www.covis.nwu.edu/geosciences/activities/shake/

Soil and Earthquakes (Grades 4-12)
http://mceer.buffalo.edu/education/exercises/soil.asp

Stress and Strain in the Earth’s Crust (Grades 5-8)
http://www.iit.edu/~smile/ph9003.html

Structural Geology Laboratory (K-12)
http://www.coaleducation.org/lessons/lesson.htm

Structure of the Earth (Grade 3)
http://www.sasked.gov.sk.ca/docs/elemsci/gr3ubesc.html

Table-top Earthquakes (Grades 9-12)

Tasty Quakes Using Gelatin (Grades K-6)
http://www.fema.gov/kids/tastyeq.htm

The Three Little Pigs in Earthquake Land (Grades K-2)

Tracking Earthquakes Around the World (Grades 6-12)
http://school.discovery.com/lessonplans/activities/trackingearthquakes/

Trembling, Spewing Earth: Earthquake Impacts on Human Activity (Grade 7)
http://www2.una.edu/geography/statedepted/lessons/trembling/trembling.html

Understanding the Global Effect of a Major Earthquake (Grades 5-12)
http://scied.gsu.edu/Hassard/mos/con9.html

Understanding the Geologic Time Scale (Grades 7-12)
http://www.tmm.utexas.edu/education/lessonplans/time/index.html

Using the Internet to Learn about Earthquakes (Grades 4-9)
http://webback.educ.umt.edu/cpgrant/ILPS/HuiQuake.htm

Virtual Earthquake Lab (Grade 8)
http://www.westga.edu/~anazzal/MGED4530/WebPages/ChrisyMcCormick/virtualearthquakelab.htm

Visual Model of the Planet Earth (Grades 3-9)
http://www.askeric.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Earth_Science/EAR0023.html

Writing the Geologic History of Your County (Grades 7-12)
http://nesen.unl.edu/lessons/geology/geohistory.html
**Additional Sites Containing Earthquake and Earth Science Lesson Plans:**

Big Chalk  
[http://www.bigchalk.com/cgi-bin/WebObjects/WOPortal.woa/Homework/Middle_School/Resource/Science/Earth_Science/Geology_2440.html](http://www.bigchalk.com/cgi-bin/WebObjects/WOPortal.woa/Homework/Middle_School/Resource/Science/Earth_Science/Geology_2440.html)

Earth Science Lesson Plans from UC-Berkeley with National Science Standards Matrix  
[http://www.ucmp.berkeley.edu/fosrec/Ma...](http://www.ucmp.berkeley.edu/fosrec/Matrix.html)

Geological Society of America  
[http://www.geosociety.org/educate/](http://www.geosociety.org/educate/)

Lesson Plans  

Science Lesson Plans from Frey Scientific for Grades 5-12  

Earth Science Lesson Plans from the Web  
[http://www.edhelper.com/cat251.htm](http://www.edhelper.com/cat251.htm)

University of Arkansas at Little Rock:  Arkansas Center for Earthquake Education and TechnologyTransfer (ACEETT)  
[http://quake.ualr.edu/schools/](http://quake.ualr.edu/schools/)

**Additional Teacher Resources**

A Listing of Earth Science Books  
[http://www.geometry.net/basic_e_bk/earth_science_activities.html](http://www.geometry.net/basic_e_bk/earth_science_activities.html)

Earthquakes for Teachers  

Free (or nearly) Teacher Training from the Federal Emergency Management Agency (includes a one-week workshop on geology and seismology)  
[http://www.fema.gov/kids/fematce.htm](http://www.fema.gov/kids/fematce.htm)

Geologic Time Scale (A great site for so many topics.)  

Multiple Intelligence Approach to Teaching Rocks and Minerals  
[http://www.chariho.k12.ri.us/curriculum/MISmart/ocean/MIRocks.htm](http://www.chariho.k12.ri.us/curriculum/MISmart/ocean/MIRocks.htm)

University of California-Berkeley Seismological Laboratory (Teaching Resources)  
[http://www.seismo.berkeley.edu/seismo/faq/teaching.html](http://www.seismo.berkeley.edu/seismo/faq/teaching.html)

**General Earthquake Information**

American Red Cross:  Earthquakes  
[http://www.redcross.org/services/disaster/keepsafe/readyearth.html](http://www.redcross.org/services/disaster/keepsafe/readyearth.html)
Associated Bay Area Governments
http://www.abag.ca.gov/bayarea/eqmaps/kids.html

Center for Earthquake Research and Information
http://www.ceri.memphis.edu/

Earthquakes for Kids from the USGS
http://earthquake.usgs.gov/4kids/

Earthquakes: A publication from the USGS
http://pubs.usgs.gov/gip/earthq1/

Earth Science Explorer
http://www.cotf.edu/ete/modules/msese/explorer.html

Educational Materials from the United States Geological Survey
http://mac.usgs.gov/mac/isb/pubs/forms/educmat.html

FEMA (Federal Emergency Management Agency)
http://www.fema.gov/hazards/earthquakes/eqklinks.shtm
http://www.fema.gov/hazards/earthquakes/
http://www.fema.gov/kids/

General Earthquake Information
http://mae.ce.uiuc.edu/Education/Teachers/general.htm

Global Earthquake Response Center
http://www.earthquake.org/teachers.html

IRIS Consortium (Incorporated Research Institutions for Seismology): Education and Outreach
http://www.iris.washington.edu/about/ENO/

National Earthquake Information Center
http://neic.usgs.gov/

Saint Louis University Earthquake Center
http://www.eas.slu.edu/Earthquake_Center/

Seismology Resources for Teachers from the American Seismological Society of America
http://www.eas.purdue.edu/~braile/edumod/seisres/seisresweb.htm

Seismology Science Fair Ideas
http://quake.wr.usgs.gov/info/scifair/

Seismosurfing
http://www.geophys.washington.edu/seismosurfing.html

Soil Liquefaction Web Site (includes a video)

This Dynamic Earth: The Story of Plate Tectonics
Understanding Earthquakes
http://www.crustal.ucsb.edu/ics/understanding/

United States Geological Survey Earthquake Hazards Program
http://earthquake.usgs.gov/

United States Geological Survey Learning Web
http://www.usgs.gov/education/

**New Madrid Links**

New Madrid Links from the National Earthquake Information Center

Rocking Hounding in Arkansas: The New Madrid Fault
http://rockhoundingar.com/geology/fault.html

The Virtual Times: The Great New Madrid Earthquake (not scientific but interesting)
http://hsv.com/genlintr/newmadrd/

**Books about Earthquakes with Activities**

*Discovering Earthquakes: Mysteries, Secret Codes, Games, Mazes* by Nancy Field, Adele Schepighe (Contributor), Nancy Lynch (Illustrator)

*Earthquake Games: Earthquakes and Volcanoes Explained by Games and Experiments* by Matthys Levy, Christina Blatt (Illustrator), Mario George Salvadori

*Janice VanCleave's Earthquakes: Mind-boggling Experiments You Can Turn Into Science Fair Projects* by Janice VanCleave (Author)