

Hello everyone,

This week's April 25, 2009 "Earth Science Sites of the Week" feature the following resources:

Editor's Picks: 1) Severe weather primer, 2) If you bit a rock.

FEATURES

GEOSPHERE

1) Thermal Vents And Plate Tectonics- a site that teaches deep ocean exploration, thermal vent ecology, and plate tectonics.

HYDROSPHERE

1) Pesticide National Synthesis Project- is a national-scale assessment of the behavior of pesticides in groundwater.

ATMOSPHERE

1) A Severe Weather Primer- answers about questions concerning hail, lightning, thunderstorms, and more.

SPACE

1) SETI Institute- explores nature and the prevalence of life in the universe.

2) Misconceptions about the Big Bang- an article about the misconceptions.

TEACHING

1) Beyond Penguins and Polar Bears- targets students of K-5 by integrating science, literacy, and polar regions.

GENERAL

1) Physics of Christmas- a worksheet about the physics of Christmas.

DEPARTMENTS

ANIMATIONS

1) Earthquakes, Earth's Interior, and Epicenter visuals- these are handy for general review or lab practical preparation.

DEMONSTRATIONS

1) If you Bit a Rock- to observe and describe physical characteristics and apply to unfamiliar rocks.

COMPUTER TIP

1) Camera Tip

QUOTES

1) Martin Luther King, Jr.

GEOSPHERE

THERMAL VENTS AND PLATE TECTONICS, (Rose Scherer), Woods Hole Oceanographic Institution, Learn about deep ocean exploration, thermal vent ecology, and plate tectonics.

<http://www.divediscover.whoi.edu/>

HYDROSPHERE

PESTICIDE NATIONAL SYNTHESIS PROJECT, USGS, The NAWQA Pesticide National Synthesis Project, which began in 1992, is a national-scale assessment of the occurrence and behavior of pesticides in streams and ground water of the United States and the potential for pesticides to adversely affect drinking-water supplies or aquatic ecosystems.

<http://water.usgs.gov/nawqa/pnsp/>

ATMOSPHERE

A SEVERE WEATHER PRIMER: Questions and Answers, NOAA, (Mike Smith), succinct answers concerning questions about hail, lightning, thunderstorms, and more.

<http://www.nssl.noaa.gov/primer/>

SPACE

1. SETI INSTITUTE, SETI, (Joan Macomber) The Mission of the SETI Institute is to explore, understand and explain the origin, nature and prevalence of life in the universe. We believe we are conducting the most profound search in human history - to know our beginnings and our place among the stars. Check out the scientific lectures section.

<http://www.seti.org/Page.aspx?pid=1241>

2. MISCONCEPTIONS ABOUT THE BIG BANG, Scientific American, (Steve Hill), Enjoy this article titled "Misconceptions about the Big Bang.

<http://www.sciam.com/article.cfm?id=misconceptions-about-the-2005-03>

TEACHING

BEYOND PENGUINS AND POLAR BEARS, Kimberly Lightle, (Kathleen Gorski), Beyond Penguins and Polar Bears is an online magazine for K-5 integrating science, literacy, and the polar regions. In each month's issue, you can:

- Learn science concepts and literacy strategies
- Read about misconceptions, equity, and technology
- Discover standards-based lessons and resources
- Integrate polar science into your curriculum

<http://beyondpenguins.nsd.org/>

GENERAL

1) PHYSICS OF CHRISTMAS, (Chris Sheehan), Attached is an activity to be used at YOUR discretion within YOUR classroom or for your own enjoyment. It's a little worksheet that goes over the Physics of Christmas adapted from a holiday related reading.

<http://www.newyorkscienceteacher.com/holidays/>

Book web page is based on: [Physics of Christmas Book](#)

DEPARTMENTS

ANIMATIONS

1) EQS, EARTH'S INTERIOR, AND EPICENTER VISUALS, (Zach Miller), The following are some earthquakes, earth's interior, and epicenter visuals that be handy for general review or lab practical preparation.

Summarize shadow zones & wave movement:

http://www3.interscience.wiley.com:8100/legacy/college/skinner/0471152285/animations/animations/mod_5/seismic_waves_770x470.swf

Shadow zone and p vs. s-wave movement in earth's interior ('movie' with audio)

http://glencoe.com/sec/science/earthscience/2007/concept_motion/NGS/Visualizing_Seismic_Waves_19.swf

Learning module with discussion of Moho boundary, exact p & s wave velocities

<http://www.uky.edu/AS/Geology/howell/goodies/elearning/module06swf.swf>

Nice summary of resulting seismograms due to shadow zone - click "p and s wave shadow zone" on the left side (other goodies on the left hand side under chapter 5 - seismology)

http://higherred.mcgraw-hill.com/classware/ala.do?isbn=0073018473&alaid=ala_1079818&showSelfStudyTree=true

DEMONSTRATIONS

IF YOU BIT A ROCK, GSA, (Chris McLelland), This site describes physical characteristics of a familiar model (candy bars) and applies it to the unfamiliar (rocks). This is also an excellent activity to introduce geological terminology used in describing rocks.

http://www.geosociety.org/educate/LessonPlans/IF_YOU_BIT_A_ROCK.pdf

COMPUTER TIP

CAMERA TIP, (David Pogue), Forcing the camera's flash to go off prevents silhouetted, too-dark faces when you're outdoors.

QUOTES

Darkness cannot drive out darkness; only light can do that. Hate cannot drive out hate; only love can do that. - Martin Luther King, Jr., (Mike Nolan)

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