Physical Science Websites

Forensics - Chemistry:

"Tales from the Poisoner's Handbook," which is available via streaming on PBS.org (http://www.pbs.org/wgbh/americanexperience/features/interactive/poisoners-tales/). My forensics students routinely give it the highest compliment that a student can give a documentary -- "I'd watch this on my own." I actually had students who were absent watch it on their own before they even came back to class, just on the word of mouth from their friends in the class.

Interactive Physical Science Demonstrations/Labs https://phet.colorado.edu/

Science Kids seems most appropriate for elementary students, K-2, interactive to help explain various concepts. Has life, physical and earth science topics http://www.sciencekids.co.nz/gamesactivities.html

Bill Nye's site. This link goes directly to resources. http://nyelabs.com/#educational

Physics for Kids - Lots of basic physical science concepts presented. http://www.physics4kids.com/

Followed by Chemistry for Kids http://www.chem4kids.com/

Not by the same person, but it has information on optics/light http://www.optics4kids.org/home/

Edheads has various activities from which to choose and is interactive http://www.edheads.org/

From Learning Science site:

http://www.learningscience.org/physci.htm

This site has a variety of activities for earth, life, and physical science. http://www.wonderville.ca/

Designed for grades 5-12, has lessons for earth, life, and physical. Has a search tool with several useful parameters to meet your needs.

http://tryscience.org/lp

Electromagnetic spectrum from NASA http://imagine.gsfc.nasa.gov/science/index.html

Energy Quest Interactive - Lower level This is from California so references about energy consumption focus on that state but other information is good.

http://www.energyquest.ca.gov/index.html

Electricity & Magnetism - Links to various information about electricity including how things work, definitions and java tutorials to use. Ensure you have that capability if you want students to use that part. Lots of other information though on the site that is readily accessible. http://micro.magnet.fsu.edu/electromag/index.html

The Exploratorium in San Francisco has many resources on their site. Check out this section.

http://www.exploratorium.edu/explore

The Periodic Table - click on the element to obtain information about the element.

http://www.chemicalelements.com/

Great site for studying simple machines.

http://legacy.mos.org/sln/Leonardo/InventorsToolbox.html

Scholastic's site for reviews of various science concepts. Move through the topics to get a list under the category you want to explore.

http://studyjams.scholastic.com/studyjams/jams/science/index.htm

Science in the news http://whyfiles.org/

Museum of Science and Industry

http://www.msichicago.org/online-science/

The Atom's Family from the Miami Museum of Science http://www.miamisci.org/af/sln/

Roller Coaster Physics

http://www.learner.org/interactives/parkphysics/

Los Alamos National Laboratory Site

http://www.lanl.gov/

High School Physics and above

http://www.phy.ntnu.edu.tw/ntnujava/

Force and motion for the new driver

http://www.myimprov.com/driving-resources/driving-force-newtons-three-laws-of-motion/

Physics 2000 from Colorado - Higher level, may help your understanding also. I've used it before but check it out as I am not always successful in getting it to download. http://www.colorado.edu/physics/2000/index.pl

For climate and energy lessons, try this site with lots of resources. http://cleanet.org/index.html

Richard Heckathorn has a plethora of physical science/physics resources on his site. http://rheckathorn.weebly.com/

Dan Burns helped develop the first site as a physics teacher traininer. The second site is his at the high school where he teaches.

http://www.ptsos.org/

http://www.lghs.net/apps/pages/index.jsp?type=u&uREC_ID=142826&pREC_ID=155303

Arbor Scientific is a science product company but their site also has activities and answers to questions.

http://www.arborsci.com/next-time-questions

The Naked Scientist site has physics experiments, demos and activities. http://www.thenakedscientists.com/HTML/experiments/physics/

Uncovering Student Ideas series of books helps us to address misconceptions. This site has resources to go along with the guides.

http://www.uncoveringstudentideas.org/resources/tips-and-strategies

For basic understandings of science, UC Berkeley's site goes through the scientific process at their Understanding Science site.

http://undsci.berkeley.edu/