

## 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 and Magnetism – Fun Science Demos Youtube

[https://www.youtube.com/playlist?list=PLat8Jeiidx1se\\_mWixx3Bb1bZ6fvFthgh](https://www.youtube.com/playlist?list=PLat8Jeiidx1se_mWixx3Bb1bZ6fvFthgh)

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 trainer. 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](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/>

Crash Course – Chemistry

<https://www.youtube.com/watch?v=FSyAehMdpYl&list=PL8dPuuaLjXtPHzzYuWy6fYEaX9mQQ8oGr>

Khan Academy – Chemistry

<https://www.khanacademy.org/science/chemistry>

PHET – Chemistry

<https://phet.colorado.edu/en/simulations/category/chemistry>

Chemistry Music Videos

<https://www.youtube.com/playlist?list=PL65159266CFC74682>

Also, [study.com](http://study.com) to search for any chemistry topic.

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/>

Collection of lessons from NGSS perspective

<https://learn.concord.org/interactions>

Ted Talk on Energy

<http://ed.ted.com/lessons/a-guide-to-the-energy-of-the-earth-joshua-m-sneideman>