

Great Internet Websites compiled by Science 21 teachers.

This year Science 21 added a new workshop to its many choices that support teacher instruction in the classroom. Teachers who attended compiled this list of the best websites on their grade level. These websites were reviewed for accurate science content, compelling graphics, and activities that encourage and promote student learning. Ideally the site had differentiated content, with a number of skill levels. For grades K-3, having a read-aloud feature was considered a bonus. Some of the highly-rated sites had a “teach, apply and test your knowledge” format that we found excellent. Above all, a site should be FUN and appeal to students. Here is a selection to add to you favorites list. All websites were current as of 3/31/08

All grades K-6

- The ultimate Science source from the BBC

http://www.bbc.co.uk/schools/scienceclips/index_flash.shtml

http://www.bbc.co.uk/schools/websites/4_11/site/science.shtml

Please note older grades (2-6) coordinate with to KS2. There are many structured teaching, review and quiz activities here. It is worth exploring.

- Rainforest Math

<http://www.rainforestmaths.com>

Visually stimulating and interactive site to review math concepts including measurement and data analysis needed for science.

- Multi-subjects

<http://www.crickweb.co.uk>

Information, reinforcement and games on many subjects. Site can be used without explanation as site has read-aloud. KS1 is for grades 1 and 2. KS 2 for grades 2-6.

- SMART board resources

<http://www.kented.org.uk/ngfl/subjects/science/IWB/>

[http://www.ngfl-cymru.org.uk/eng/vtc-home/vtc-ks2-home/vtc-ks2-science\(2\)](http://www.ngfl-cymru.org.uk/eng/vtc-home/vtc-ks2-home/vtc-ks2-science(2))

You will have to explore these sites to find what you want, but they are excellent

Kindergarten

- Sound matching game

<http://faculty.washington.edu/chudler/flash/sounds.html>

This is an easy game to play with different sounds to match with the correct picture. There are no read instructions so you might have to explain it to the students the first time.

- Loads of additional activities for the 5 senses unit (this is a teacher site)

<http://faculty.washington.edu/chudler/chsense.html>

There are many different activities listed here that you can use to enrich the unit 2 curriculum.

- Resources for salamanders and newts

<http://cybersleuth-kids.com/sleuth/Science/Animals/Amphibians/Newts/index.htm>

There are many pictures here for SMART board lessons, bulletin boards or student journal pages.

- Bubbles (teachers site)

<http://homepage.mac.com/keithmjohnson/soapbubbler.com/index.html>

This site has many resources that you can use in the classroom. Explore the menu bar on the left side of the home page. The videos and multicultural photo gallery are good.

Useful tips for a field day culminating activity.

- Ranger Rick Games

<http://www.nwf.org/kidzone/kzPage.cfm?siteId=3&departmentId=77>

- PBS Arthur games

<http://pbskids.org/arthur/games/index.html>

Both these sites have games which develop logical thinking and skills.

First Grade

Floating and Sinking

- <http://www.ngfl-cymru.org.uk/vtc/Phase2delivery/Wales/Science/Keystage2/Materialsandthe/Floatingsink/Introduction/activitypop.htm>

Interactive SMART board activity on how a ball sinks. Includes timing, data recording and graphing. Best for whole class instruction.

States of Matter

- <http://www.fossweb.com/modulesK-2/index.html>

Then pick Solids and Liquids. Students can drag different solids and liquids to the freezer or oven to see how the matter changes, can be used whole class, center station or individually. Interactive and great graphics.

- http://www.abpschools.org.uk/page/modules/solids-liquids-gases/slg2.cfm?coSiteNavigation_allTopic=1

Solids liquids and gases animations you click on the buttons at the bottom of the screen. Music is very irritating (click sound off button!). You can print information from the screen. Don't forget to check out page 4 for the quiz.

- http://www.catie.org.uk/testing_time_index.html

Use as a teaching tool. In the first activity pictures are easy to sort, The second fosters good group discussion. the third is mostly informational.

Hermit crab pictures

- <http://aqualandpetsplus.com/Bug,%20Hermit%20Crabs.htm>
- <http://aqualandpetsplus.com/Bug,%20Hermit%20Crabs%20II.htm>

Excellent detailed pictures of hermit crabs, including habitat. Use as a teacher demo/Smartboard or on TV.

Second Grade

Measurement

- <http://www.funbrain.com/cgi-bin/getskill.cgi?A1=gba&A2=6>

Go to Measure it section. Use as computer lab lesson has ruler with a red line in inches and centimeters. Students need to select the correct answer. Will self correct wrong answers.

- www.rickyspears.com/rulergame

Reinforcement. Different levels of difficulty.

Energy

- www.eon-uk.com/EnergyExperience/127.htm

Use as a whole class lesson and then as a center. Read aloud is a nice feature text is also on the screen. Note the English accent! Waits for key stroke to continue, so you can pause for class/group discussion. A great site.

Also remember to check

- http://www.bbc.co.uk/schools/ks2bitesize/science/physical_processes.shtml

For lots of grade appropriate resources including magnets, sound, seasons etc. Activities are structured with review and quizzes.

- http://www.sciencemuseum.org.uk/onlinestuff/games/energy_flows.aspx

A great game for students to identify energy changes. Use in groups of individually.

Seasons, and day and night

- <http://www.bnsc.gov.uk/learningzone.aspx?nid=3261>

Go to the light and dark, and earth and moon sections. Use as a short visual to reinforce concepts. Not so easy for students to navigate by themselves.

Moon phases

- <http://antwrp.gsfc.nasa.gov/apod/ap010218.html>
- <http://www.astro.wisc.edu/~dolan/java/MoonPhase.html>

The upper site has great pictures/animations of what the moon looks like from earth.

The lower site is very fast. If you want to talk about the phases keep stopping it. You can look at both views from earth and a "space view".

Third Grade

Plants

- <http://library.thinkquest.org/3608/index.html>

Information site with extensive vocabulary list. Use for research. Goes through plant growth including reproduction.

Electricity

- <http://www.andythelwell.com/blobz/>

Does not have a read-aloud but can be used without for most students (demo if necessary). Kid friendly and easy to use, gives written information about circuits, switches conductors etc. Includes a quiz on what they have learned. A 5 star site!

- <http://resources.schoolscience.co.uk/BritishEnergy/11-14/index.html>

A good site, but some vocabulary may have to be translated from English eg. cell=battery.

- How a light bulb works

<http://home.howstuffworks.com/light-bulb1.htm>

Good background/informational site

The water cycle

- <http://www.epa.gov/safewater/kids/>

This site is for kids and teachers on many different grade levels. There are games and activities.

Camouflage/peppered moth simulator lesson for Smartboards

http://www.echalk.co.uk/Science/Biology/PepperedMoth/Peppered_MothWEB.swf

Painted lady butterfly

- <http://www.zoomschool.com/subjects/butterfly/species/paintedlady.shtml>

Informational site (some resources have to be paid for – like the leveled readers)

- <http://www.yesnet.yk.ca/schools/jackhulland/projects/butterflies/>

Movies of painted lady butterflies hatching and other resources.

Fourth Grade

What is a scientist?

- www.bbc.co.uk/schools/ks2bitesize/science/activities/materials.shtml

Reinforcement of vocabulary. Reading level low but you may need to model how to move the objects for some students. Revision bites provide more information, just note that revision = review in US.

Owl Pellet Dissection

- www.kidwings.com/owlpellets/index.htm#

The great thing about this site is you can compare the pellets of other species of owls. Use during computer lab with a smart board or class center station. Nearly as good as the real thing.

- www.caosclub.org/nsw/funstuff/mystery.html

Lot of text with no read aloud. Students discover a rock which is really an owl pellet. Good for enrichment.

New food pyramid

- <http://www.mypyramid.gov/kids/index.html>

Many resources here. Good section is the My Pyramid Blast Off game. Students get to choose foods to put into the new food pyramid together with exercise selection. Use this site for students as part of a class lesson. You may have to model how to use the game. 5 star site!

- <http://www.primarygames.com/science/nutrition/games/amazingfooddetective/start.htm>

Game to promote healthy foods, helps students identify nutritional no-nos. Stimulating and fun.

Food chains

- <http://www.crickweb.co.uk/assets/resources/flash.php?&file=foodchains>

Students click and drag individual members of food chains into the appropriate order. Best feature: easy and clarity of understanding

Simple Machines

- www.edheads.org/activities/simple-machines/index.htm

A must for your favorites list. Use in class as a station. Students locate and identify simple machines. Can be used without explanation. Graphics are kid friendly and motivate students to learn.

Build a volcano

- www.nhm.ac.uk/kids-only/fun-games/volcano/build-a-volcano.html

You might want to try this activity out before using with the students. Select characteristics of lava and the amount of water and then erupt the volcano. Demonstrates different volcano types.

- www.iknowthat.com

In the search box (top right of screen) type science lab. Both activities on earthquakes and volcanoes Have good graphics and are kid friendly and interactive. 5 stars!

Fifth Grade

Cells

- www.cellsalive.com

Site for students, describes cell parts and functions. Also includes mitosis and meiosis. Best used as teacher led resource initially.

Body systems

- www.iknowthat.com

In the search box (top right of screen) type body systems. 3 activities will be found. The science lab human body is excellent (and other topics too)

- <http://guest.portaportal.com/jwilford>

This is a very comprehensive resource on many levels. Check out all activities to see which are suitable for your students before using in the classroom as enrichment or a center activity.

Heart

- <http://science.nationalgeographic.com/science/health-and-human-body/human-body/heart-article.html?source=G4100&kwid=ContentNetwork|929422225>

Would best be used as a class demo or presentation tool. Good graphics, animations, pictures and text.

- <http://www.activescience-gsk.com/miniweb/content/heart/hcs.html>

Also very good resource

Virtual knee surgery

- <http://www.edheads.org/activities/knee/index.htm>

Virtual hip surgery

- <http://www.edheads.org/activities/hip/index.htm>

Not for the squeamish but kids love it! Really shows the steps needed in surgery. Kids “operate” themselves great interactive.

Enrichment activities for various systems

- http://www.bbc.co.uk/science/humanbody/body/interactives/3djigsaw_02/index.shtml?muscles
- http://www.bbc.co.uk/science/humanbody/body/interactives/3djigsaw_02/index.shtml?skeleton
- http://www.bbc.co.uk/science/humanbody/body/interactives/3djigsaw_02/index.shtml?nervous

Asthma

- <http://www.interactive-tutorials.com/sites/36/imagebank/tutorials/AsthmaChildhood/index.html>

This goes into great detail about the disease, symptoms, treatments, etc. Good for research, and fact finding or enrichment.

Weather

- <http://teacher.scholastic.com/activities/wwatch/index.htm>

Comprehensive site. Use as station or for teacher lead activity during unit.

- <http://www.edheads.org/activities/weather/index.htm>

Easy site with read aloud. Maybe simplistic for some students, but fun and kid friendly.

- <http://dsc.discovery.com/convergence/perfectdisaster/quiz/quiz.html>

Weather hazards, quiz and information. Use for enrichment.

Sixth Grade

Reading in the content area for all units

- <http://www.sciencenewsforkids.org/>

Brain booster/ logical thinking skills

- <http://school.discoveryeducation.com/brainboosters/?pID=brain>

Great links sites

- <http://www.topmarks.co.uk/Default.aspx>
- <http://www.fossweb.com/>
- http://www.tryscience.org/parents/se_6.html
- <http://www.bbc.co.uk/schools/ks3bitesize/science/> Use this site as a resource for many topics.

Scientific method

- <http://www.energyquest.ca.gov/projects/battery.html>
- Good example of a model scientific experiment done by kids.

Energy sites

- <http://virtual.questacon.edu.au/rollercoaster/main.html>

Roller coaster design, students can design their own coaster and view from several points of view. Use as enrichment/station activity.

- http://www.bbc.co.uk/schools/scienceclips/ages/10_11/forces_action.shtml

Good site for those students who need review/reinforcement. Students can manipulate variables in a car/ramp activity. Needs very little explanation pretty simple.

- http://www.school-for-champions.com/science/newtons_cradle.htm

Virtual Newton's cradle!

- <http://www.eia.doe.gov/kids/energyfacts/science/formsofenergy.html>

An informational page about energy

Space

- <http://amazing-space.stsci.edu/> and
- <http://amazing-space.stsci.edu/homework/>
- http://www.planet-science.com/planet10/solar_preload.html and
- <http://www.planet-science.com/wired/start.html>

Helps students manipulate the conditions on an imaginary planet and "test" its stability.

Interactive game on the planets

- <http://science.rolls-royce.com/resources/universe/universe.php>

A challenge for kids in 6th grade but good for enrichment/self starters

Ecology- Design your own power stations and address global issues

<http://www.eon-uk.com/EnergyExperience/557.htm>

and locally

<http://www.eon-uk.com/EnergyExperience/93.htm>

Predator prey video/animation

http://www.bbc.co.uk/schools/gcsebitesize/teachers/biology/predator_preay.shtml

Food chain video

<http://magma.nationalgeographic.com/ngexplorer/0309/quickflicks/index.html>

Brain pop but free as it is through National Geographic.

Energy in the food pyramid

http://www.bbc.co.uk/schools/gcsebitesize/teachers/biology/food_chain.shtml

Energy Resources

<http://www.sciencemuseum.org.uk/exhibitions/energy/site/EIZGame7.asp>

This site would best be used whole or small group as a starting point for class discussion.

Everything global warming

http://www.kids.net.au/kidscategories/Kids_and_Teens/School_Time/Science/Environment/Global_Warming

Global warming

<http://www.teachersdomain.org/resources/tdc02/sci/phys/matter/greenhouse/index.html>

Great webquest site for all environmental issues

<http://library.thinkquest.org/CR0215471/welcome.htm>

SMART BOARD graphics on acid rain

<http://www.ngfl-cymru.org.uk/esdgc/Content.asp?id=1.4.2.2.2&mode=pupil&locale=en>

Recycling

<http://www.epa.gov/recyclecity/>

<http://www.sita.co.uk/education/kids/flash>