# Best of the Best Science Websites for Elementary Grades Special thanks to Beth Dennis for sharing this website

Note: This document is saved in the District Share folder, under Library Media Centers.

### General Science:

**Integrate Science and Literacy:** You'll find a variety of stories here which integrate literature with a variety of science units.

http://beyondpenguins.ehe.osu.edu/department/science-and-literacy/feature-story

#### Bitesize Science:

This British site, designed for grades 3-6, includes materials for teaching living things, materials, and physical processes. Each concept area includes a myriad of subtopics and units. Each unit has an online learning activity a "bitesize" explanation of the concept, and an online guiz. Look under the Teacher Link for lesson plans and worksheets.

http://www.bbc.co.uk/schools/ks2bitesize/science/materials/

Everyday Mysteries: Fun Science Facts from the Library of Congress (LOC): A tremendous

stockpile of quick science knowledge, on everything from agriculture to zoology.

http://www.loc.gov/rr/scitech/mysteries/archive.html

The museum of science, art and human perception Online exhibits from this San Francisco museum is good for several different grade levels, and includes hands-on activities, articles, and additional websites about various topics from astronomy & space, earth, everyday science, human body, living things, seeing, and much, much more. Click on the 'Explore' tab, and then choose 'see all'. http://www.exploratorium.edu/explore/topics/astronomy\_space/#top

**History Wired:** Explore over 450 objects not on display by selection a topic from the homepage map on this experimental website from the Smithsonian. Double click on the topic under "Science/Medicine" to reveal further info, pictures, & other multimedia selections.

http://historywired.si.edu/

How Everyday Things Are Made: A wide range of videos on how something is made, from jellybeans to crayons to airplanes and more!

http://manufacturing.stanford.edu/hetm.html

Just for Kids: From the Univ. of IL extension service, this site offers a set of animated, interactive options covering a wide range of science topics, including plants, gardens, insects, a woods walk, and many more. Teacher's guides are available via a link on the top of each page. http://urbanext.illinois.edu/kids/index.html

**Magic School Bus:** Materials on animals, space, the human body, and much more are explored through games and guided tours.

http://scholastic.com/magicschoolbus/

#### Ology:

Learn about the 'ologies', from the American Museum of Natural History. Includes interactive games, interviews with scientists, solving mysteries, and much more.

http://www.amnh.org/ology/paleontology#

**Planet Games Arcade:** From NOAA (the National Oceanic and Atmospheric Administration), this site provides several interactive games focused on ocean and air, including saving the beach, humpback whales, recycling, and more. Good for learning centers and filler options.

http://games.noaa.gov/

Smithsonian Museum of Natural History Virtual Tour:Explore the entire SmithsonianMuseum of Natural History from your classroom!!!The panorama views have hotspots with evenmore detail available.<a href="http://www.mnh.si.edu/panoramas/">http://www.mnh.si.edu/panoramas/</a>

**The Why Files**: for upper elementary and secondary grades, this site truly does attempt to answer the "why" questions relating to science. There are interactive options included, as well as "Cool Science Images" link for stupendous digital images.

http://whyfiles.org/

# Animals: (also see animal webcams below)

**4-H Virtual Farm:** On a virtual visit to a horse, beef, dairy, poultry, fish, or wheat farm, you have a choice of movies, animation, learning activities, and options for students to learn the science behind farming. <u>http://www.sites.ext.vt.edu/virtualfarm/main.html</u>

Animals- Nat Geo Wild: National Geographic provides great photos and short informational pieces about a variety of animals, as well as a fast facts blurb and a map showing where in the world the animal lives, as well as multimedia options. Students can layer in by category or animal name. <u>http://animals.nationalgeographic.com/animals</u>

Beyond Penguins & Polar Bears: A host of thematic units based on penguins and polar bears.

#### http://beyondpenguins.ehe.osu.edu/

**Journey North:** "A global study of wildlife migration and seasonal change." Begin the journey by clicking on the "Timeline" and follow a wide variety of animals as they journey the globe. Be sure to check out the 'Teacher' link. **Note:** "If you live within 50 miles of the migration route, Operation Migration invites you to reserve a live presentation for your classroom".

http://www.learner.org/jnorth/KidsJNAbout.html

**Our Wild Neighbors:** Animated sites introduce learners to animals found in Alaska. This specific page talks about animal camouflage.

http://www.alaskacenters.gov/our-wild-neighbors.cfm

**PestWorld for Kids:** from site: "Think of them as animals out of place. Out in nature, they're just doing their jobs. But when they move into our homes and yards, then we call them pests. So come explore the world of pests. Then use your new knowledge to outwit the pests in your world." Check out the "Lesson Plans" link for at bottom of page for K-8.

http://www.pestworldforkids.org/index.html

### Animal Webcams & Videos:

**Instant Reply—Zoo Minutes:** 1 minute video clips of 28 different animals <u>http://www.knowitall.org/instantreplay/content/program.cfm?offset=15&SeriesIDpassed=58</u>

**Panda Webcams:** (several to choose from. Note: viewing is limited at the National Zoo to 15 minutes).

<u>http://nationalzoo.si.edu/Animals/GiantPandas/</u> (note: use Internet Explorer) <u>http://www.zooatlanta.org/1212/panda\_cam</u> <u>http://www.oiccam.com/webcams/index.html?/panda/</u>

**San Diego Zoo Animal Cams:** Webcams for pandas, polar bears, elephants, and ape habitats can be found here. You can also access a number of other videos and podcasts here. Note: These stream live, so may be slow for individual searches.

http://www.sandiegozoo.org/videos/index.html

**CritterCam**, **Interactive Mission & WildCam**: The current National Geographic webcam is in Africa. Choose from CritterCam (a research tool designed to be worn by wild animals. It combines video and audio recording with collection of environmental data such as depth, temperature, and acceleration), Interactive Mission, or WildCam (conservation initiative that uses the Internet to connect people to Earth's last remaining wild places. Using streaming video technology, WildCam Africa brings viewers from all over the world to the remote Pete's Pond in Botswana where animals go about their daily lives. And because it's live, you never know what may happen next!)

http://animals.nationalgeographic.com/animals/crittercam-wildcam/

**Eagles Online:** View live webcams on Hornby Island in British Columbia, Canada; at Libby Dam in Libby, MT; and Oklahoma.

- <u>http://www.hornbyeagles.com/webcam.htm</u>
- •

<u>http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=libby&pagename=e</u> <u>agle\_cam\_view</u>

• <u>http://www.suttoncenter.org/pages/live\_eagle\_camera</u>

**Monterey Bay Aquarium- Live Web Cams**: 8 webcams provide a wealth of choices for studying ocean life. Options include watching the kelp forest, the fresh water and sea otters, the aviary, the penguin, the out bay, and the inner part of Monterey Bay. Note: these are live, note the time difference (live feed runs from 7-7, archived footage may be viewed off times).

http://www.montereybayaquarium.org/efc/cam\_menu.aspx

# Astronomy/Space:

Arounder: Explore Mars and the Moon via these QuickTime Virtual Reality tours. <u>http://mars.arounder.com/</u><u>http://moon.arounder.com/</u>

#### Ask an Astronomer:

Video podcasts by NASA scientists on topics ranging from the movement of stars to the status of Pluto to black holes

http://coolcosmos.ipac.caltech.edu/cosmic\_classroom/ask\_astronomer/video/index.html

NASA for Students: Choose your grade level range. The K-4 link includes access to multimedia stories, play and learn activities, and a picture dictionary. The 5-8 link includes "In the Spotlight" videos and a career corner.

http://www.nasa.gov/audience/forstudents/k-4/index.html

**Smithsonian National Air & Space Museum:** Explore the capsule of the Freedom 7 Mercury flight, Gemini VII, the mobile quarantine facility of the Apollo 11 astronauts and more through these QuickTime Virtual Reality movies.

http://www.nasm.si.edu/interact/qtvr/uhc/qtvr.htm

### Chemistry:

Chem4Kids! The text and graphics explain the basic concepts of chemistry, with segments onmatter, states of matter, solids, liquids, and gases are available, along w/an online quiz for eachsection.<a href="http://www.chem4kids.com/index.html">http://www.chem4kids.com/index.html</a>

# Earth Science (weather, geology, water cycle, etc):

**A students' guide to Global Climate Change:** Students can learn a great deal about climate change using this site. Includes both current climate change as well as the history of climate change through the ages. From the EPA.

http://www.epa.gov/climatechange/kids/index.html

Beyond Weather and the Water Cycle: Several thematic units to choose from. http://beyondweather.ehe.osu.edu/

**Earthquakes for Kids:** From the US Geological Survey (USGS), students can find information on the latest quakes, see animations, view earthquake pictures, and much more.

http://earthquake.usgs.gov/learn/kids/

#### NASA:

**Wild Weather Adventure!** This educational game, found under the "Earth" tab, has students pilot a blimp around the world while answering a number of science questions, in easy/medium/hard levels.

http://spaceplace.nasa.gov/wild-weather-adventure/en/

**Other topics include (from top menu):** Space, Sun, Earth, Solar System, People & Technology, plus a link for Parents & Educators.

**The Old Faithful WebCam:** Watch a number of geysers erupt at Yellowstone National Park. Check out the Q&A section for great reference info. Archived views are seen on 1<sup>st</sup> link, live views on 2<sup>nd</sup> (note: use Internet Explorer). You can also link to webcams at other national parks from this site.

http://www.yellowstone.net/oldfaithfularchives.htm

http://www.nps.gov/yell/photosmultimedia/yellowstonelive.htm

**Thirstin's Water Cycle:** This is an animated look at the water cycle. An audio track is included. From the Environmental Protection Agency (EPA).

http://www.epa.gov/safewater/kids/flash/flash\_watercycle.html

**USDA Air Quality Images:** Webcam views can be seen from several locations across the US. Hover over a location on the map and you see a still image from the camera. From the US Forest Service, these webcams show air quality.

http://www.fsvisimages.com/descriptions.aspx

The Virtual Cave:Visit the world of caves and see superb digital images of a wide range of<br/>ave formations and cave types.<a href="http://www.goodearthgraphics.com/virtcave/">http://www.goodearthgraphics.com/virtcave/</a>

Weather Wiz Kids: Developed by a meteorologist in IN, this site provides straight-forwardinformation for a number of weather and natural events, from hurricanes to earthquakes. Alsoincluded are weather jokes & folklore.<a href="http://www.weatherwizkids.com/">http://www.weatherwizkids.com/</a>

### Habitats & Biomes:

What's it Like Where You Live? Biomes of the world, from Rainforest to Grasslands, as well as freshwater & marine ecosystems, are explored. This site contains easy-to-read text screens, which include a number of maps and images to illustrate the area for students. Site is from the Missouri Botanical Gardens. <u>http://www.mbgnet.net/index.html</u>

### Paleontology:

**The Field Museum's Online Exhibits:** Students can study soil, see the world's largest & most complete T Rex, explore a number of archeology finds, and much more.

http://archive.fieldmuseum.org/exhibits/online\_exhib.htm

Kids Dig Reed: Learn about archeology as you use this virtual dig at a 19th century farm site.Check out the movie-based tour of the dig, a gallery of artifacts, a concise history, and superblearning games.<a href="http://www.kidsdigreed.com/">http://www.kidsdigreed.com/</a>

# Physics (matter, forces, light, etc):

States of Matter: Cool little animation from Harcourt School Publishers. <u>http://www.harcourtschool.com/activity/states\_of\_matter/index.html</u>

Building Big Forces Lab: "This lab simplifies the real-life forces and actions that affect structures." For upper elementary and secondary grades, other labs include materials, loads, and shapes. <u>http://www.pbs.org/wgbh/buildingbig/lab/forces.html</u>

Virtual Tours for Science: (also listed under individual discipline)

**4-H Virtual Farm:** On a virtual visit to a horse, beef, dairy, poultry, fish, or wheat farm, you have a choice of movies, animation, learning activities, and options for students to learn the science behind farming.

http://www.sites.ext.vt.edu/virtualfarm/main.html

Arounder: Explore Mars and the Moon via these QuickTime Virtual Reality tours. <u>http://mars.arounder.com/</u><u>http://moon.arounder.com/</u>

**The Field Museum's Online Exhibits:** Students can study soil, see the world's largest & most complete T Rex, explore a number of archeology finds, and much more.

http://archive.fieldmuseum.org/exhibits/online\_exhib.htm

History Wired: Explore over 450 objects not on display by selection a topic from the homepage map on this experimental website from the Smithsonian. Double click on the topic under "Science/Medicine" to reveal further info, pictures, & other multimedia selections. http://historywired.si.edu/

**Kids Dig Reed:** Learn about archeology as you use this virtual dig at a 19<sup>th</sup> century farm site. Check out the movie-based tour of the dig, a gallery of artifacts, a concise history, and superb learning games. <u>http://www.kidsdigreed.com/</u>

**Our Wild Neighbors:** Animated sites introduce learners to animals found in Alaska. This specific page talks about animal camouflage.

http://www.alaskacenters.gov/our-wild-neighbors.cfm

**Smithsonian National Air & Space Museum:** Explore the capsule of the Freedom 7 Mercury flight, Gemini VII, the mobile quarantine facility of the Apollo 11 astronauts and more through these QuickTime VR movies.

http://www.nasm.si.edu/interact/qtvr/uhc/qtvr.htm

Smithsonian Museum of Natural History Virtual Tour:Explore the entire SmithsonianMuseum of Natural History from your classroom!!!The panorama views have hotspots with evenmore detail available.<a href="http://www.mnh.si.edu/panoramas/">http://www.mnh.si.edu/panoramas/</a>

The Virtual Cave:Visit the world of caves and see superb digital images of a wide range of<br/>ave formations and cave types.<a href="http://www.goodearthgraphics.com/virtcave/">http://www.goodearthgraphics.com/virtcave/</a>