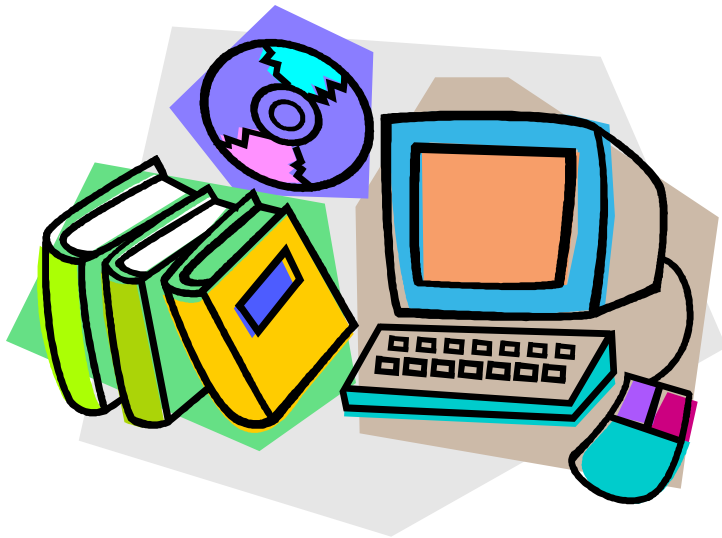


Science Spotlight: Transforming Technology



Presented by
Tracy Tomm

K8 Science Update @ WIU

April 22, 2016

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Website: <http://sciencespot.net>

Teacher Tools – What do I use the most?

Weebly – Offers free websites and tools to help you build your online classroom; used by our junior high and high school teachers

Examples: mrstomm.com and [HJHS Website](#)

Other Options: [Wix](#), [Schoolology](#), [Edmodo](#), & [Wikispaces](#)

Snipping Tool - May be used to capture images, images of worksheets, etc.; options to save as graphics files that can be imported into PowerPoint, whiteboard software, and video software

Quizlet.com – I use this free site to share vocabulary sets with the students; easy to export word sets or print for IEP/504 students; also offers games.

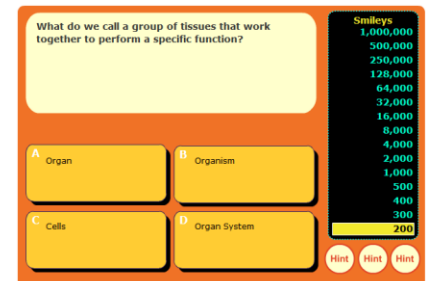
Also check out [Study Stack](#) – Lots of game options for vocabulary practice or review.

Educreations – My favorite free iPad app for creating video “whiteboard” lessons; easy-to-use and offers online storage for easy access by students and parents

Example: [Pond Water Webs](#)

Quia.com – A great site for creating review games (matching, hangman, Rags to Riches, Jeopardy-style game, and more!

I also use it for online quizzes (automatically graded!)



Smillionaire

All About Google

(Dropbox is still my favorite!)

Google Drive - Google's version of Dropbox; offers up to 5 GB free storage when you sign up.

Google Classroom – Incorporate the tools in Google Drive to help you manage your digital classroom.

Blogger – Works with your Google account; easy-to-use format to edit and manage your pages with learning resources

Google Forms - Create a quick form to survey students at the of a lesson/unit, gather information about an assignment or topic, or set up easy-to-use registration forms.

Example: First Day

Google Earth – WOW! Always amazing to use with the kids!



Earth Watch 2016

Seismologists

Watch the news and search the Internet to find significant events that impact the Earth. Mark the locations on the map by # and keep a record in your notebook (46-47) as well as entering the data in your team's spreadsheet.

Volcanologists

Meteorologists

NOTES:
ONLY ONE person/team should be entering data at a time
Make sure it saves before you close the tab!

Geologists

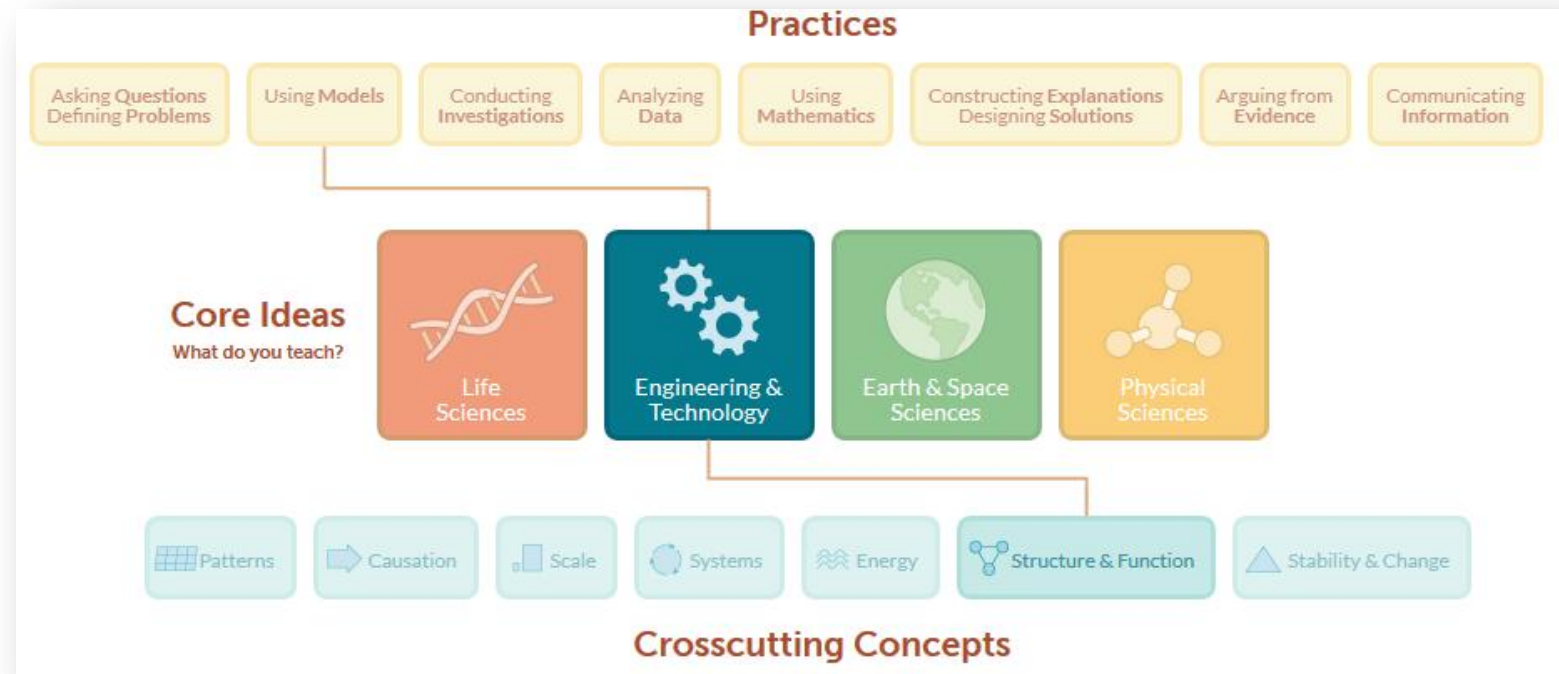
Go to Google Drive → Shared With Me → Tomm to find your team's file

Miscellaneous

- ✓ Teams use Google Sheets in a shared folder to keep track of data for each team
- ✓ Use Google Earth to locate the places
- ✓ Track news articles/reports & images by saving them on Google Docs or Slides

NGSS & STEM Resources – My Top 5 Picks

[Concord Consortium](#) – A great resource to find new ideas that target NGSS with an easy-to-use online tool! Also check out their **[STEM Resource Finder!](#)**



[Understanding Science](#) - Use their search tools to find resources aligned to NGSS - online lessons, activities, and classroom lessons.

[PBS Learning Media](#)– A great resource for finding videos, podcasts, and lesson plans on a variety of science topics as well as other content areas. Free access with registration!

More resources ...

[eGFI \(Engineering Go For It!\)](#) - You are sure to find a new project to use to challenge your students while targeting Next Gen and STEM concepts!

[cK-12.org](#) - Use their search tools to find online resources for students or check out their FlexBook options to create your own textbook aligned to NGSS and your curriculum!

**What are your favorite resources for
NextGen or STEM?**

Also check out ...

[Science Snacks from the Exploratorium](#) – Free lesson and activity ideas for all levels and science topics!

Video Resources – Top 5 Picks

[PBS Learning Media \(Teacher's Domain\)](#) – A great resource for finding videos, podcasts, and lesson plans on a variety of science topics as well as other content areas. Free access with registration!

[NeoK12](#) – Videos as well as images, quizzes, and links to online activities for all subject areas
Also try **[Watch Know Learn](#)** for more options

[BrainPop](#) – Requires subscription for access to most movies, but there are a few free ones; available for all subject areas

[Gooru](#) – Great search tools to find all types of resources (not just videos) and set them up as a Remix for your students to use during a lesson or unit.

[Scholastic Study Jams](#)

More Science Videos

[National Geographic](#)

[Crash Course](#)

[Crash Course Kids](#)

[NOVA Education](#)

[SciShow](#)

[Flinn Videos](#)

[Science Discovery](#)

[Weather Channel](#) (Strange Weather and Prospectors!)

[Real Player](#) – Download the free program to allow you to download videos for offline viewing (not all videos can be downloaded, but works with YouTube, SchoolTube, and TeacherTube.) Also check out **[Download Helper](#)** for FireFox

PBL Resources – My Top 5 Picks

BIE PBL Resources – A “do-it-yourself” type of resource allowing you to find what you need to utilize problem-based learning units that will apply to your subject/students.

MERLOT – Online units and support materials for utilizing technology in your science classroom; check out their [science & technology](#) materials

CIESE – Join one of their collaborative projects to connect your classroom to others around the world; offers a variety of projects to match your curriculum

Example: [Human Genetics](#)

Zooniverse – Visit this site to find ways for your students to get involved in real science projects; offers online investigations to help scientists collect and analyze data

NSF Case Study Collection – Use case studies with your students to connect classroom learning to real-world problems; provides a searchable database with over 400 case studies

Also check out [BioQuest](#) and [PBL Clearinghouse](#)

Cool Tech Tools

Cartoons, Movies, & Stories

[Zimmer Animations](#)

[Toondoo](#)

[Comic Creator](#)

[PBS Cartoon Studio](#)

[PowToon](#)

[Story Starters](#)

[Story Maker](#)

Presentations/Posters

[Wordle](#)

[Prezi](#)

[Popplet](#)

[Big Huge Labs](#)

Online resources for digital projects are available on the [Tech Skills](#) page of the [Science Spot's Kid Zone](#).

Engage Your Students – My Top 5 Picks

[PBS You Try Its](#) – Tons of great resources for learning, such as the [DNA Workshop](#)

[Nobelprize.org](#) – A collection of outstanding interactives designed to explore Nobel-prize winning projects and technologies, such as the [Blood Typing Game](#) ([Worksheet available](#))

[Interactive Sites for Students](#) - Find new websites to use for teaching or reinforcing classroom learning; available for all subjects and levels

[Lawrence Hall of Science](#) – Tons of fun online activities (as well as apps) to explore science concepts, such as pH with the [Alien Juice Bar!](#) ([Worksheet available](#))



GEMS Alien Juice Bar Game

credits

- Challenge 1** Set up your juice bar--Learn about acids and bases
- Challenge 2** Serve your customers--Practice identifying acids, bases and neutrals
- Challenge 3** Make mixed drinks for your customers--Learn about pH scale

LHS GEMS

The last one ...

[WebAdventures](#) – A collection of online activities

that are sure to challenge your students as they learn about CSI or any of the other topics.

Example: [MedMyst](#) ([Worksheets and teacher guides are available](#))

The image is a collage of six interactive activity thumbnails for 'Web X Adventures'. The top banner reads 'WEB X ADVENTURES' in a metallic, industrial font. The thumbnails are arranged in a 2x3 grid:

- Top Left:** A man in a black t-shirt holding two orange arrows that say 'cool SCIENCE careers'.
- Top Middle:** The title 'MED MYST' in green, 3D-style letters above a group of five diverse characters in lab coats.
- Top Right:** A woman in a blue lab coat and orange safety goggles, with the text 'CSI: THE EXPERIENCE' overlaid.
- Bottom Left:** The title 'RECONSTRUCTORS' in white, 3D-style letters above a small inset image of a man and a woman in lab coats.
- Bottom Middle:** The title 'VET' in large, red, 3D-style letters with 'Virtual Clinical Trials' written below it, set against a background of a human silhouette and medical figures.
- Bottom Right:** The title 'NEUROPOLIS SQUAD FORENSIC SCIENTISTS' in a metallic box above a group of three characters in yellow and blue suits.

In the bottom right corner of the collage, the text 'también en español' is written in blue.

Find more great resources for your students ...

The Science Spot's Kid Zone

A collection of resources for students

Google™ Custom Search

What do you want to explore?

Biology

[Cells & Classification](#)

[Microscopes](#)

[Genetics & DNA](#)

[Plants & Animals](#)

[Insects](#)

[Bald Eagles](#)

[Health & Human Body](#)

[Ecology & Environment](#)

[Pond Water](#)

Astronomy

[Solar System & Planets](#)

[Stars & Constellations](#)

*Test your coding abilities
with an activity from [Code.com!](#)*

Chemistry

[Matter & Atoms](#)

[Periodic Table Sites](#)

[Acids & Bases](#)

Physics

[Motions & Forces](#)

[Simple Machines](#)

[Sound & Light](#)

[Electricity & Magnetism](#)

[Junk Box Wars](#)

Earth Science

[Earthquakes, Volcanoes,](#)

[& Plate Tectonics](#)

[Rocks & Minerals](#)

[Dinosaurs & Fossils](#)

[Weather](#)

Other Topics

[Forensic Science Page 1](#)

[Forensic Science Page 2](#)

[Measurement Systems & Tools](#)

[Inventions & History](#)

[Science News & More](#)

[Science Fair Sites](#)

[Careers & Money](#)

[Tech Skills](#)

[Reference Desk](#)

[Trivia Challenge](#)

[Science Games & Puzzles](#)

[Fun & Games](#)

*Try a [CSI Web Adventure](#)
or [other online activities!](#)*

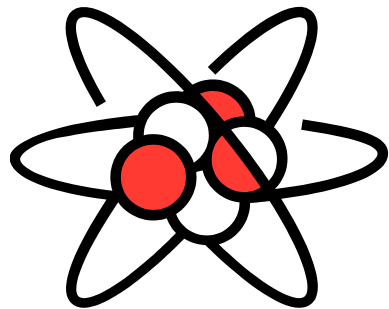
*Check it out ...
[PBS Kids - Design Squad](#)*

<http://sciencespot.net/Pages/kidzone.html>

Contact Information



Visit my website at <http://sciencespot.net/>



Contact me by e-mail at
ttomm@sciencespot.net