Elementary Math and Science Resources

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Introduction Greeting

Hello!

Here is a list of amazing resources shared by teachers across the Unites States. Should you come across an amazing video, webinar, book, website, etc., please add it to the Math, Science (scroll down), or General section. Feel free to invite any other educators now, or throughout the years, to view and edit and share this document. We learn to be the best teachers possible by sharing with and learning from others.

Sincerely, Professor Koonin

Math Resources

Ideas	Resources
Math ideas and advice from The Innovative Educator blog -From an educator who hated math and thought all her math teachers were subpar. She hopes you'll give your students a better experience. Highlighted posts • See how this elementary teacher empowered his students to make their own math tutorials to 1) demonstrate mastery 2) serve as tutorials for classmates - Kids Teach Kids with Mathcasting • Mathalicious is a fantastic and free site that makes real world connections with math concepts - Innovative Ideas That Make Sense for Those Hungry for Math Instruction • Vi Series of Mathematical aids to make math musical, magical and fun. Read this blog post for details - Vi series	Math Resources
From the Free Tech for Teachers Blog	11 Mathematics Resources to

	Try
Riveting talks by remarkable people, free to the world. Many are translated and the comments are fantastic and worth contributing to.	Math TED Talks
Exploring functions algebraically and graphically Focus is on exploring and discovery.	http://www.wolframalpha.com/
Look at the math/science/tech section of videos.	100 Video Sites Every Educator Should Bookmark
Huge collection of math tutorials that teachers could use to support their math instruction. They are all free.	Khan Academy
These are whole professional development sessions for educators who want to teach math in innovative ways incorporating tech	Math units of study
Lectures about Math	100 Incredible Open Lectures for Math Geeks Teacher's TV - Math
The Global Education Conference has an amazing series of free 45 minute webinars by prominent people from around the globe. Here is one I came across that may be of interest. I'm sure there are more. What I would recommend is treating these like reading and have students come to class prepared to discuss/make meaning of what they heard.	Corey J. Nascenzi Engage and Motivate Math Students RECORDING LINK
Blogs from Economic Teachers • Has good ideas, thoughts, examples, and lectures for real-life math.	 Mikeroeconomics Gene Hayward David Mayer Ken Norman Tim Harford Tim Schilling Jason Welker
A group of more than 300 educators sharing more than 813 interesting resources around the teaching and learning of mathematics.	Math Links Owner: Darren Kuropatwa
Your idea here	Your resource here

Your idea here	Your resource here
Your idea here	Your resource here

Science Resources

Ideas	Resources
From the Free Tech for Teachers Blog	11 Science Resources to Try in 2011
Riveting talks by remarkable people, free to the world. Many are translated and the comments are fantastic and worth contributing to.	Science TED Talks
Google Body is a detailed 3D model of the human body. You can peel back anatomical layers, zoom in, click to identify anatomy, or search for muscles, organs, bones and more. You can also share the exact scene you are viewing by copying and pasting the URL.	http://bodybrowser.googlelabs.c om/body.html#
Collect images of weather and post daily on shuttercal	http://shuttercal.com
NSDL is the Nation's online library for education and research in Science, Technology, Engineering, Mathematics.	National Science Digital Library
Observe electron microscope images	http://www.denniskunkel.com/
These are whole professional development sessions for educators who want to teach science in innovative ways incorporating tech. Of note, there are great ideas for using Google Earth.	Science units of study
The Global Education Conference has an amazing series of free 45 minute webinars by prominent people from around the globe. Here is one I came across that may be of interest. I'm sure there are more.	Dr. Rajeev Swami Engaging and Effective Science Teaching RECORDING LINK
A group of more than 350 Science Teachers who share over 1500 resources.	Science teachers Owner: Dean Loberg

Course syllabi for CUTeach science education program for K-12 teachers	http://stem.colorado.edu/cu-teac h/enrolled/links/step1 http://stem.colorado.edu/cu-teac h/enrolled/links/step2
Your idea here	Your resource here
Your idea here	Your resource here
Your idea here	Your resource here

General Resources:

- I like these innovative ideas for <u>differentiating instruction</u>. I might require students to read about this and challenge them to ensure this is a part of all their lesson planning.
- I've been directed to Lemov's book, "Teach Like a Champion" with concrete tips on how to create an effective learning environment.
 http://www.amazon.com/gp/product/0470550473/ref=ord_cart_shr?ie=UTF8&m=ATVPDKIKX0DER
- How People Learn. Summary of the research on learning. John D. Bransford, Ann L. Brown, Rodney R. Cocking (ed.) <u>How People Learn</u>. (2000) From the National Academy Press.