# **STEM Resources**

CK12 - FREE STEM Resources http://www.ck12.org/student/ and http://www.ck12.org/teacher/

Science Net Links <a href="http://sciencenetlinks.com/">http://sciencenetlinks.com/</a>

Illuminations - Resources for Teaching Math <a href="https://illuminations.nctm.org/">https://illuminations.nctm.org/</a>

National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html

eGFI Lessons/Resources Grades 6-8 <a href="http://teachers.egfi-k12.org/category/lessons/grades-6-8-lessons/">http://teachers.egfi-k12.org/category/lessons/grades-6-8-lessons/</a>

PA Power Library <a href="http://www.powerlibrary.net/Remote/MainR.asp?ID=PL7321">http://www.powerlibrary.net/Remote/MainR.asp?ID=PL7321</a>

The Concord Consortium STEM Resource Finder https://concord.org/stem-resources

PBS Learning Media <a href="http://www.pbslearningmedia.org/">http://www.pbslearningmedia.org/</a>

Khan Academy <a href="https://www.khanacademy.org/">https://www.khanacademy.org/</a>

The 10 Best STEM Resources - NEA <a href="http://www.nea.org/tools/lessons/stem-resources.html">http://www.nea.org/tools/lessons/stem-resources.html</a>

Engineer Girl <a href="http://www.engineergirl.org/">http://www.engineergirl.org/</a>

NASA - For Students http://www.nasa.gov/audience/forstudents/index.html

NASA - For Educators <a href="http://www.nasa.gov/audience/forstudents/index.html">http://www.nasa.gov/audience/forstudents/index.html</a>

The Ultimate STEM Guide for Kids

http://www.mastersindatascience.org/blog/the-ultimate-stem-guide-for-kids-239-cool-sites-about-science-technology-engineering-and-math/

STEM Collaborative http://www.stemcollaborative.org/additionalResources.html

Dot Diva <a href="http://www.dotdiva.org/">http://www.dotdiva.org/</a>

STEM Works http://stem-works.com/

Girls + Math = More STEM Women http://www.dreambox.com/blog/girls-math-more-stem-women

iSeek Careers - STEM http://www.iseek.org/careers/stemcareers

Math Moves U http://www.mathmovesu.com/#/home

STEM Career View <a href="http://vacareerview.org/68/careersq/career-search/results">http://vacareerview.org/68/careersq/career-search/results</a>

Virginia Career View for Middle Grades <a href="http://www.vacareerview.org/68/">http://www.vacareerview.org/68/</a>

Danica McKellar - STEM Advocate http://www.danicamckellar.com/math-books/

### YouTube Channels For STEM

#### Intermediate 3 - 5

SciShow Kids

\*CrashCourse Kids - just science right now.

**Electric Company** 

The New Electric Company

Sick Science with Steve Spangler: fun science lab activities and lessons

National Geographic Kids

National Geographic Wild - Nat Geo Wild is the network all about animals from National Geographic

Math & Learning Videos - Numbers and math concepts become easier as your kids Learn about Numbers, Addition, Subtraction, Telling time, Place Value and much much more.

<u>TeacherTube Math</u> - Fractions, Multiplication, Elementary Math, Middle School Math, High School Math, College Math, All subjects regarding math!

### Secondary

**Stanford University** 

TedED - Ted Education - TED talks for students

Intelligent YouTube Channels

### Science

SciShow

Earth Science - Landforms w/ a GoPro - Moab Towers - wow! GoPro Channel

NOVA on PBS

Spangler Effect - making science fun

DeepSkyVideos - Exploring deep space - one video at a time.

Minute Physics - Simply put: cool physics and other sweet science.

<u>Veritasium</u>- science and engineering videos featuring experiments, expert interviews, cool demos, and discussions with the public about everything science.

Smarter Everyday - Science

Bozeman Science - AP Env. Sci, Bio, Physics, Anatomy, etc

<u>Veritasium</u> - science and engineering videos featuring experiments, expert interviews, cool demos, and discussions with the public about everything science.

<u>Periodic Videos</u> - Your ultimate channel for all things chemistry. A video about each element on the periodic table. And we upload new videos every week about science news, interesting molecules and other stuff from the world of chemistry.

Physics Girl - Physics videos for every atom and eve.

eHowEducation - Math & Science

175 Science & Education Channels

<u>In a Nutshell</u> - Kurzgesagt: Videos, explaining things; like evolution, time, space, global energy and our existence in this strange universe.

ScienceatNASA-short videos from NASA

#### Math

<u>PBS Math Club</u> - 7th grade Common Core Standard for math; topics like adding and subtracting integers, equations, ratios and proportions, and statistics. We use uncommon examples like Mean Girls to explain adding negative numbers in our show.

<u>Vsauce</u> - Our World is Amazing.

Numberphile - Videos about numbers - it's that simple.

\*\*Vi Hart - Vi Hart likes triangles! AND APPLES!

<u>WOWmath.org</u> - Algebra 1&2 and AP Calculus AB. Please check out my website <u>WOWmath.org</u>. It has many more resources, as well as all of my videos in a more organized format.

\*\*patrickJMT - No songs, no dances, no silly hats, no low cut shirts and sultry voices.

Mathantics - Middle School, Algebra & Geometry videos

Khan Academy: lessons from their teachers often focusing on mathematics

ProfRobBob - videos related to Algebra, Geometry, Algebra 2, Trigonometry,

Precalculus, Calculus, and AP Statistic

GeoGebra Tube - Dynamic mathematics interactivities GeoGebra

## **Technology & Engineering**

<u>CalTech</u>: California Institute of Technology

<u>MIT</u>

\*\*MIT+K12 everyone who loves to learn and teach, to help everyone dream and make. We produce Science Out Loud, a freely-accessible web series written and hosted by MIT students covering the science of humanoid robots, farts, and everything in between.

Computerphile - Videos all about computers and computer stuff.