

Physics and Math Technology & Web Resources

List of websites for Physics Demos:

1. http://www.exo.net/~donr/activities/Newton's_Laws_Demonstrations.pdf
2. <http://sprott.physics.wisc.edu/demobook/chapter1.htm>
3. <http://www.stevespanglerscience.com/lab/experiments/heavy-newspaper-air-pressure-science-experiment>
4. Smart Board Wiki Page: <https://smartboardsmarty.wikispaces.com/About+this+website>

List of Good Science Youtube Channels!

- AsapTHOUGHT - <http://www.youtube.com/user/AsapThought>
- SciShow Space - <https://www.youtube.com/channel/UCrMePiHCWG4Vwqv3t7W9EFg>
- ASAPScience: https://www.youtube.com/channel/UCC552Sd-3nyi_tk2BudLUzA
- Bozeman Science: <https://www.youtube.com/channel/UCEik-U3T6u6JA0XiHLbNbOw>
- Crash Course: <https://www.youtube.com/channel/UCX6b17PVsYBQ0ip5gyeme-Q>
- It's OK to be Smart: <https://www.youtube.com/channel/UCH4BNi0-FOK2dMXoFtViWHw>
- Minute Earth: https://www.youtube.com/channel/UCeiYXex_fwqYDonaTcSlk6w
- Minute Physics: <https://www.youtube.com/channel/UCUHW94eEFW7hkUMVaZz4eDg>
- Numberphile: <https://www.youtube.com/channel/UCoxcjq-8xIDTYp3uz647V5A>
- Periodic Videos: <https://www.youtube.com/channel/UCtESv1e7ntJaLJYKIO1FoYw>
- SciShow: <https://www.youtube.com/channel/UCZYTCIx2T1of7BRZ86-8fow>
- Science Alert: https://www.youtube.com/channel/UC1lw_fo-eHfVZ1zQuYM4IAA
- Smarter Every Day: <https://www.youtube.com/channel/UC6107grRI4m0o2-emgoDnAA>
- theBrainScoop: <https://www.youtube.com/channel/UCkyfHZ6bY2TjqbJhiH8Y2QQ>
- Veritasium: <https://www.youtube.com/channel/UCHnyfMqiRRG1u-2MsSQLbXA>
- ViHart: https://www.youtube.com/channel/UCOGeU-1Fig3rrDjhm9Zs_wg
- Vsauce: <https://www.youtube.com/channel/UC6nSFpj9HTCZ5t-N3Rm3-HA>
- Physics Girl: <https://www.youtube.com/user/physicswoman>

Google Forms

part of the google drive suite (previously google doc)...allows for easy form creation and summary is available to creator

Survey Monkey

another online survey resource (please expand)

Poll Everywhere

a free response ("clicker") service that uses text messaging

Prezi

a cloud-based presentation software...

[Khan Academy](#)

Free for students and teachers, a source of math videos and practice for maths from grade 3 to 12. A source that can really help you flip the classroom. Have students join and add you as a “coach” so you can track their progress. Downside may be students develop a dependence on instant feedback. There have been criticisms due to the incorrectness of some of the videos - however as you would not ONLY use Khan Academy as a stand-alone program in your class, this is easily worked around.

See [Ted Talk with Salman Khan](#)

[Manga High](#)

Students can learn through gaming using this interactive website. Schools must pay for a subscription. Kids can compete as a school with other schools in various challenges as well as collect points by facing challenges posed by the teacher.

[Compadre.org](#)

A bunch of math and physics resources.

[BrainPop](#)

Great videos and quizzes for kids. Schools must pay for an account

[Gizmos - Explore Learning](#)

Great explorations and simulations for kids to SEE how math and science works. Schools must pay for an account

[Wordle](#)

Wordle is a toy for generating “word clouds” from text that you provide. The clouds give greater prominence to words that appear more frequently in the source text

[APA Reference Style](#)

If you're set against using software, here's a description of how to cite using APA.

[Screenr](#)

Screencasting from the web without the need for software (same as Camstudio, or Camtasia). The benefit of Screenr is that it allows you to save the video in many different formats whereas many screencasting software packages (or free ones) require you to change the format of the video you're making - and if you're making many videos this is TIME wasted.

[Animoto](#)

from the website: “Turn your photos and music into stunning video slideshows.”

[maths300](#)

a paid membership gives teachers access to lessons on this website and a basic but well designed math software package. Lessons are based on the Australian curriculum, but are good because they integrate many different aspects of mathematics (probability, algebra, generalization and problem solving, number theory, etc.)

[Tracker](#)

Free version of the logger pro video analysis. The website also offers a bunch of free videos that can be used for the video analysis.

[Today's Meet](#)

A website that allows you to collect comments from the audience. You can also download all of the comments.

[FreeMind](#)

Free mindmapping software (download, not online) that looks pretty cool.

[Mendeley**-*-----](#)

Free online reference manager and pdf organizer

[GoAnimate](#)

Free video maker

[Weebly](#)

Free website creation tool

[Deal Extreme](#)

Great place to buy cheap electronics (USB charger, iPod adapters, LED pigs...)

[Ubiquitous Presenter](#)

A program that uses Tablet PC ink to allow instructors to annotate pre-prepared slides and students to create submissions for in-class activities. UP extends this functionality by taking many of Classroom Presenter's features onto the web. Ubiquitous Presenter was developed at UCSD, but is free for anyone to use. Basically you can upload a file with questions that students can answer, either multiple choice like clickers, or text answers. The teacher can then access all the answers and see who answered what (the students need access to tablets for this). See these videos for more info: <http://vimeo.com/9403048>

<https://www.youtube.com/watch?v=SJIWQIRULI0>

[Smart Board SmartyS](#)

A WIKI resource made by a former teacher with many tips, workshops, tutorials and SMART teaching materials, all free and downloadable.

[I.S.L.E - Investigative Science Learning Environment](#)

Comprehensive learning system for introductory Physics that engages students in experiences that mirror experiences of practicing scientists.

[PCCL - Interactive Physics Simulations](#)

This website has many flash animations and interactive exercises for Mechanics, Electricity, Optics, Chemistry and Matter. A great resource!

[Scheme-it](#)

Great website for drawing schematic diagrams of circuits. It has the symbols for all electrical components pre-made and when putting the circuits together everything “snaps” into place to make it easier. You can export it as a PNG or PDF (I think PDF’s are better quality if you’re going to be scaling the picture at all).

[The Physics Classroom](#)

Great site that has a bunch of lessons and explanations for all of the stuff we need. It’s just a good reference to have!

[Veritasium](#)

This is a Youtube channel with high quality physics videos. The creator has a PhD in physics and his passion is film making. So he has combined the two. This could be great for good videos.

[Perimeter Institute](#)

Well developed (and technically sound) activities and videos are available for reference and utilization from a Canadian physics institute. The materials are directed at specific grade windows (i.e. 9-12 or 11-12). If you choose to order materials, this lovely message pops up “YES. I am a Canadian teacher and I understand that I am eligible to order one copy of each of the Perimeter Classroom Kits at no charge.”