

# Apps Recommended by Colleagues for Math & Science Teachers

all apps listed here are free unless otherwise indicated

highlighted apps are a lean collection of a suggested FREE all purpose starter set  
this does work!

## General Purpose Apps

[Dropbox](#): the file system for the iPad

[Box](#): 5 GB of free space to store and share files online

[iBooks](#): read eBooks and ePub

[Evernote](#): capture everything and it's searchable, even text in images

[WolframAlpha](#): \$2; should probably be listed in every math category below

[Wikipedia](#): an excellent launch pad for further research

[Dictionary](#): self explanatory

[TouchCalc](#): a good calculator

[Free Graphing Calculator](#): remember, Wolfram does this too, but costs

[Quick Graph](#): another graphing app

[Skype](#): communicate with each other and the world

[iChromy](#): much better browser than Safari; now called [Diigo Browser](#)

[Easy Chart HD](#): 99¢; reviews so far are underwhelming

[Science360](#): great videos on all topics, including physics/some math stuff

[zapd](#): actually an iPhone app, but you can use it with your iPad to create simple websites that include photos and links.

[WunderMap](#): really nice weather site, I like it much better than the weather channel. From the folks at Weather Underground.

[Dragon Dictation](#): Good speech-to-text software

[AudioNote Lite](#): Synchronizes notes, typed or freehand, and audio similar to a LiveScribe pen.

[Diigo Browser](#): **Only for teachers or students 17+**; Diigo browser (formerly iChromy) brings the best of Chrome's interface, speed and Diigo's web annotation service to the iPad.

## The Google

Maps (pre-installed)

[Google Search](#) (via Safari)

Google Calendar (via Safari; may not be necessary if you sync to iOS Calendar app)

Gmail (via Safari; may not be necessary if you sync to iOS Mail app)

Google+ (via Safari; may not be ready for Prime Time but worth talking about)

YouTube (pre-installed)

[Google Earth](#)

Google Docs (via Safari)

## Video

[iMovie](#) (\$5)

[Vimeo](#): a free alternative to iMovie, not as feature rich

[ShowMe](#): allows you/your students to record on a whiteboard-like interface & share online

[ScreenChomp](#): Same as above for younger students, made by TechSmith

[Explain Everything](#): (\$3) record on whiteboard interface-import video and pics and annotate, animate, narrate then share

## Audio/Podcasting

[iPadio](#)

[AudioBoo](#)

[Cinch](#)

[iTalk](#)

[Recorder & Editor ~ iSaidWhat?!](#): 99¢, edit & share audio directly on the iPad

[Garage Band](#) - Best App for making music on the go.

## Photos

[Instagram](#): Capture a pic, add a filter, share everywhere, quick

[Camera+](#): 99¢; a great camera app with lots of post processing power

[PhotoShop Express](#): a lean version of Photoshop for your iPad

## Professional Development

[Zite](#): a personal news reader, easy to share and save too

[Flipboard](#): similar to zite

[Twitter](#)

[Instapaper](#) or [Read It Later](#): archive articles to read later

[TED](#): the app lets you save videos to watch later offline

## Group Messaging

[Kik](#): intuitive interface

[Grouped{in}](#): integrated with Evernote!

[Swaggle](#): not an app, set it up on the web, interesting [limitations/features](#)

[GroupMe](#): US only for now

## Teaching:

[iAnnotate](#): \$10; allows you to annotate, highlight, comment on and share pdf files i.e. student work

[PDF Reader Pro](#): \$2; a less expensive alternative to iAnnotate, may not be as feature rich

[neu.annotate](#): Free alternative to iAnnotate, may not be as feature rich

[MPEG Streamclip](#): application for your computer to transcode videos to iPad format

[Keynote](#): \$10; yes, powerpoints can have a place in math class; use with [Keynote Remote](#)

[Prezi](#): A presentation viewer; can't create in-app, allows viewing

[Numbers](#): \$10 spreadsheet app for iPad - yes, you could use Google Docs, but this looks so much *nicer* when you show parents a gradebook page for their kid, or when you want a nice UI for spreadsheets :)

And really...that's like 3 coffees!

Some [suggestions for apps in math class here](#)

## Math/Maths

[Maths !!!](#) by Math Pentagon: Essentially just a worksheet app. Teachers create and review assignments, reports, interactive whiteboard, interactive LIVE virtual classroom. Students scribble, practice worksheets. Free Math App licenses to teachers and schools. [www.mathpentagon.com](http://www.mathpentagon.com)

## Pre-Algebra

[Number Line](#): game: percents, fractions, decimals

[Motion Math](#): 99¢ game: percents, fractions, decimals

[Motion Math Zoom](#): free lite version: number line, decimals, negatives (AWESOME app!)

[Motion Math: Hungry Fish](#): free lite version: addition, subtraction

[Units](#): 99¢, but I got it for free. Ask me how that works.

[Combine4](#): \$2; game, order of operations, fact fluency; iPhone only but works well on iPad

## **Algebra**

[Algebra !!!](#) by Math Pentagon: Essentially just a worksheet app. Create and review assignments, Reports, Interactive whiteboard, Remote Live assistance. Free Math App licenses to teachers and schools.

[www.mathpentagon.com](http://www.mathpentagon.com)

## **Geometry**

[Camera Protractor Lite](#)

[Sketchpad Explorer](#): free until Sept 2011 then \$4, [more info here](#)

[GeoBoard](#): \$2; reviews on this app aren't great

## **Precalculus**

## **Calculus**

## **General Science**

[How Stuff Works](#): articles, lists, videos, quizzes, about everything from cars to chemistry. Searchable by topic, save stuff to favorites. Some fluffy stuff, but some valuable stuff too.

[PBS](#): clips and full-length programs; not every show, but a nice selection that changes frequently. Also available for iTouch and iPhone, search app store for it.

[Video Science by Sciencehouse](#): Demonstration videos which will either give you ideas for labs, or will let you show demos that are too messy, dangerous or inconvenient to do yourself.

[Khan academy](#) : Khan Academy allows you to learn almost anything for free. video's algebra,

## **Biology**

[Virtual cell](#): version 1.0 only has photosynthesis and electron transport chain but the supporting website has flash videos of every basic cellular function

[Click and Learn](#): High-level interactives from Howard Hughes Medical Institute

[Project NOAH](#): Noah stands for networked organisms and habitats. Think of Project Noah as a tool people can use to document and learn about their natural surroundings and as a technology platform research groups can use to harness the power of citizen scientists everywhere.

The Project Noah app has 3 modes:

➡ **Spottings:** Grab a photograph of a plant or animal that you find interesting or want to learn more about, select the appropriate category, confirm your location, add some descriptive tags, and submit it. If you need help identifying species, no prob, just select the check box and the community will suggest species IDs

➡ **Location-based Field Guide:** See what kinds of plants and animals have been spotted near you and learn more about them. Search through a map view, list view, or grid view of most recent spottings all based on your location. You can filter wildlife by categories so you can explore what you're most interested in.

➡ **Field Missions:** We work with labs, environmental groups, and various organizations to help them gather important data for their research projects. Missions can range from photographing squirrels or mushrooms to tracking migrating birds or invasive species. Missions allow users to contribute to ongoing research projects, but they can also be for fun and exploration.

[Murky Reef - Science and Reading Comprehension of coral reefs & sharks](#): \$2; Multimedia (text, audio, video, interactive graphics) based learning of the science of coral reefs and biology of sharks. Each science section is followed by 2 levels of quizzes - one that exercises information recall & comprehension and the other exercises ability to apply the concepts learnt. Appropriate for ages 7 & up.

## Chemistry

[Molecules](#): database of molecules rendered to be rotated in 3D. Love this one!!

[GasLawsHDLite](#): Beginning chemistry students can use this app to study the various relationships that exist between pressure, volume, temperature and number of particles of a gas.

## Physics

[speedClock](#): 99¢; Easily measure the speed of cars, boats, skaters, skiers, cyclists, running dogs, model cars, footballs, tennis serves etc, etc. Uses motion detection, so you only have to hold up the iPhone towards the moving object. Also includes two distance estimation tools.

[Video Physics](#): \$3; Take a video of an object in motion, mark its position frame by frame, and set up the scale using a known distance. Video Physics then draws trajectory, position, and velocity graphs for the object. Share video, graphs and data to facebook, your Photo Library and to your computer running Vernier's Logger Pro software.

BounceBounce: can't find this in the app store

[Nuke Effects](#): evaluate 28 different effects of nuclear weapons, of which 13 relate to blast, 5 to thermal radiation, 1 to initial nuclear radiation, 2 to early fallout, 6 to crater dimensions, and 1 to fireball dimensions. Most of the parameters are presented as functions of range and yield.

## Physics Apps That Need Links & Descriptions

Aero!: ???

Cstr Physics

Xperica HD

ColorMixHD

sprintTimer <http://www.topendsports.com/testing/products/apps/photo-finish-timer.htm>

“ start the timer and point the camera towards the finish line. Then *sprintTimer* will build an image of narrow slices of the finish line, each representing 0.03 s in time.” iPhone and iPad. \$1.99

seeLevel

seeCompass

DataAnalysis <http://itunes.apple.com/us/app/dataanalysis/id375603883?mt=8>

“a general purpose iPad App for the plotting and analysis of all types of data that can be formulated as x,y pairs. “ Free. iPad.

## Environmental Science

Google Earth (see category **The Google** above)

[Star Walk](#): \$5; interactive guide to the night sky, orients as you hold your iPad up to the sky (or even through the Earth below your feet), updates positions of planets and major satellites.

[LeafSnap](#): pictures/taxonomic information about common trees. Capability to take pics in the field, then compare pics with identified leaves/blooms. Also available in app store for iTouch & iPhone

[MoonGlobe](#): Interactive, hyperlinked globe of the moon. Can be rotated on all axes, names of features can be visible or hidden, tapping any named feature provides general information about it and links to more online.

## Other Games that do Learning Math/Science well

i.e. games that aren't “drill and kill”

[IToochLite for Grade 5](#): more grade levels and full versions will be out soon

\*\*\*there are several apps that focus on the cognitive aspects of math (visual/spatial reasoning, logical thinking)

[zoologic](#) (99¢)

A game of deduction and logic, in which the player attempts to fill a puzzle grid with dogs, cats, mice, and their respective favorite foods (bones, fish and cheese). As the player progresses, new obstacles arise, in the form of a raging bull and hungry ants, which turn this thought-provoking puzzle into a peace keeping mission, challenging even for adults! The 150 puzzles are divided into 10 pages, allowing players as young as 5 years old to enjoy this game, and keep adults who like logic puzzles coming back for more.

[bokus](#) (99¢)

Block your opponents so they cannot add anymore blocks on the board

[set](#) (\$8)

To find a SET you must recognize three cards on the gameboard of 12 cards in which each of the features, examined independently, are either the same on the 3 cards OR different on the 3 cards. That's it. One rule. It is deceptively simple. Thus, it's easy to learn. A 6 year old can do it. But it's a challenge for life, and mastering it challenges college students and their professors.

[zentomino](#)

Find your Zen, with this challenging take on the traditional pentomino puzzle game! Over 50 puzzles for free!

#### [rush hour](#)

This is the original sliding block Traffic Jam puzzle, brought to you by the company who created it – ThinkFun.

Rush Hour comes with 35 challenges, ranging from Beginner to high Expert. Enough challenges to get you hooked on Rush Hour... Upgrading to the full version will get you a whopping 2500 challenges, enough for years of Rush Hour fun!

#### [digit](#) (\$2)

It's a great day to be a dog in the park.

The sun is shining, there are no cats to be seen... and the tantalizing whiff of a big, crunchy bone can be smelled from somewhere nearby.

But shuffling around the patches of turf to dig it up is going to require creativity and cleverness.

That's no problem for a keen canine like you: The challenge will only make the reward that much more delicious, so get there, think it through and dig it!

#### [tanzen](#) (99¢)

Find your Zen, with this updated version of the classic tangram puzzle game! Over 500 puzzles!

#### [solitaire chess free](#)

Can you leave just one man standing? Simple to learn, impossible to master, addictively fun - Solitaire Chess by ThinkFun is a new logic puzzle, based on the rules of Chess. For chess newbies and experts alike, Solitaire Chess can be played quickly – every move must be a capture – and early challenges may seem easy, but soon you'll find yourself in deeper waters, pushing your mind and thinking hard about your moves to try and solve the game.

The FREE version features 40 challenges, 10 at each level, to get your feet wet and get you thinking.

#### [Murky Reef : 1st - 2nd Grade Reading, Science & Math:](#)

Coral reef themed app that fosters critical thinking through cross-curricular learning and thematic games. Games are based on Bloom's taxonomy of learning as applicable to 1st and 2nd graders.