



Amazing Math Toolbox for Teachers

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www.fdlrstech.com (check under "Handouts" for this document)
Math institute wiki: <http://fdlrsinstitute2007.wikispaces.com>

Interventions/Instructional Support

- Cuisenaire Rods - http://en.wikipedia.org/wiki/Cuisenaire_rods
Concrete manipulatives. Ideas for cuisenaire rods
<http://assoc.orange.fr/une.education.pour.demain/articlesrrr/sw/begsw.htm>
<http://teachertech.rice.edu/Participants/silha/Lessons/cuisen2.html>
<http://www.iit.edu/~smile/ma8616.html>
- FASTT Math – <http://www.tomsnyder.com>
Software that targets the development of fluency in addition, subtraction, multiplication, and division.
- Go Solve – <http://www.tomsnyder.com>
Uses graphic organizers to help students plan for solving word problems in addition, subtraction, multiplication, and division.
- InspireData – <http://www.inspiration.com>
Applies proven strategies of visual learning to data literacy; supporting strong critical thinking.

Virtual Manipulatives

- Virtual Cuisenaire Rods . <http://www.arcytech.org/java/integers/integers.html>
bright clique – <http://www.indivisuallearning.com>
A flexible set of digital tools for demonstrating key mathematical concepts on computers, projectors, or interactive whiteboards.
- Virtual rulers/protractor –
<http://www.desktopruler.com/products-dr.htm>
<http://www.svet-soft.com/ruler.shtml>
<http://www.spadixbd.com/freetools/>
<http://www.downloadjunction.com/product/store/15482/index.html>
- Classroom Suite (IntelliMathics) – <http://www.intellitools.com>
Includes animation, manipulatives, text to speech, and multimedia to demonstrate basic math concepts.
- Virtual Geoboards –
<http://nrich.maths.org/content/id/2883/circleAngles.swf>
<http://illuminations.nctm.org/LessonDetail.aspx?ID=L554>
<http://www.riverdeep.com>
- Visual Fractions - <http://www.visualfractions.com/>
Includes online tools for learning fractions, PowerPoints to help teach fractions, downloadable worksheets, and downloadable software for creating circle fractions.
- Illuminations - <http://illuminations.nctm.org/>
A collection of online, standard-based virtual manipulatives and lessons, to make math come alive in the classroom and at home.
- Crickweb - <http://www.crickweb.co.uk/ks2numeracy.html>
Collection of online interactive math and geometry activities.
- BlockCad - <http://web.telia.com/~u16122508/proglego.htm>
A free Win virtual Lego land.

Lego Factory - <http://factory.lego.com/>

A free online virtual Lego land.

NLVM – <http://nlvm.usu.edu/en/nav/vlibrary.html>

Collection of online manipulatives and visualizations for all grade levels.

Pintar Virtual Labs – <http://pintarmedia.com/vprod>

An interactive math toolbox suite targeting fractions, shapes, numbers, and measuring.

SmartBoard Software –

<http://www2.smarttech.com/st/en-US/Support/Downloads/SBS/Windows/SBSv97Win.htm>

Includes a collection of virtual math tools. Students can run the software on their own computers to practice mathematical concepts.

Simulations/Visualizations

MathPad & MathPad Plus – <http://www.intellitools.com>

Simulated “paper and pencil” basic arithmetic software for students who need to use a computer to write with.

Virtual Pencil - <http://www.hentermath.com/>

Simulated “paper and pencil” arithmetic and algebra software for students who need to use a computer to write with.

Broken Calculator – http://seeingmath.concord.org/broken_calculator

Online simulation of a broken calculator. Students must think through how to solve problems using the keys available.

Algebra Tiles –

http://go.hrw.com/hrw.nd/gohrw_rls1/pKeywordResults?keyword=Mb1+Tools

Explore Learning – <http://www.explorelearning.com>

Extensive online set of mathematic simulations and visualizations.

SELECT Math - <http://boston.k12.ma.us/teach/technology/select/index.html>

Aligns virtual manipulatives and visualizations with standards

GeoGebra - <http://www.geogebra.org/cms/>

Virtual tools for geometry, algebra, and calculus

Algebrus (Win) - <http://www.astrise.com/software/algebrus>

A comprehensive visualization tool for higher mathematics. the trial version has some features disabled

Eduscapes - <http://eduscapes.com/sessions/smartboard>

Includes links to a variety of simulations and visualizations

Homework Helpers

GraphTablet (Win) - <http://www.graphtablet.com/graphtablet.html>

A free program for creating custom graph paper

Free Online Graph Paper . <http://incompetech.com/graphpaper/>

Free online PDFs of various graph papers. includes an online generator so you can create customized graph paper and print it out

Animated Math Dictionary –

http://www.harcourtschool.com/glossary/math2/index_temp.html

Provides basic definitions of math terms, along with text to speech so students can hear the definitions and visualizations.

A Math Dictionary for Kids –

<http://www.teachers.ash.org.au/jeather/maths/dictionary.html>

Translating Word Problems . <http://www.purplemath.com/modules/translat.htm>

Keywords to help with word problem translation

Calculators –

Calculator Collection (Win . Mac9) - <http://www.riverdeep.com>

Basic set of calculators that includes a fraction calculator

Big Calculator (Win) - <http://www.sensorysoftware.com/bigcalculator.html>

A free basic calculator that can be adjusted for really big buttons

KoalaCalc (MacOSX) - <http://www.macropodsoftware.com/koalacalc/index.html>

A free simple and scientific mode calculator

Calc Thingy (MacOSX) - <http://liquidbinary.com/software/>

A simple interface but fairly powerful calculator

MoffSoft FreeCalc (Win) - <http://www.moffsoft.com/freecalc.htm>

A great basic calculator with adjustable size and color schemes, and a simulated paper tape display

AlgeKalk (MacOSX) - <http://goldfishsoft.com/algekalk.html>

Simple utility that factors numbers, give square root, converts decimals, and more

FrakKalk (MacOSX) - <http://goldfishsoft.com/frakkalk.html>

Simple utility for adding, subtracting, multiplying and dividing fractions

Online Calculators and Algebra Tools -

http://go.hrw.com/hrw.nd/gohrw_rls1/pKeywordResults?keyword=Mb1+Tools

WebMath – www.webmath.com

Online tool that helps students solve math problems, showing step by step solutions. General math through calculus.

Algebra Help – <http://www.algebrahelp.com/calculators>

Online tool that helps students solve math problems. Can be read aloud by screen readers.

GoMath - <http://www.gomath.com/>

Online tool that helps students solve math problems. Includes algebra and geometry calculators.

Hot Math - <http://hotmath.com/>

Provides online help and guidance for math problems in most text books.

Conversion Tools – <http://www.convertit.com>

Basic online collection of conversion tools.

Math Tips for Students with Visual Impairments - <http://www.tsbvi.edu/math/>

Ideas and recommendations for helping students with visual impairments learn math concepts.

Algebra Solver – <http://www.algebrasolver.com/index.shtml>

An interactive, algebraic problem solver and graphing tool.

Microsoft Math (Win) - <http://www.microsoft.com/math/default.mspx>

An all-in-one math homework solution. Solve equations, graph functions, use a fully-functional graphing calculator, solve triangles, and convert standard units.

WebGraphing - <http://www.webgraphing.com/>

Online equation-graphing environment, from simple to advanced calculations.

Equation Wizard (Win) . <http://www.equationwizard.com/>

Algebraic equation solver software. trial version good for 30 equations

Cosmeo . <http://www.cosmeo.com/math/>

A fee-based, homework video-tutor for many national textbooks