

Math Resources
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Free (or close to it) Online Math Activities & Software			
Grade Level	Math Area(s)	Website	Comments
K-12	All	http://nlvm.usu.edu/en/nav/vlibrary.html	Provides a matrix by grade level group and math topic. Click to find a multitude of interactive math activities based on NCTM standards.
K-8	All	www.dositey.com	Includes printable worksheets, math challenges for which answers may be submitted, games
K-12	Geometry	www.asset.asu.edu Log in, then navigate to MathActive	English, Spanish, & Navajo interactive math activities
K-12	All	www.asset.asu.edu Log in, then navigate to United Streaming videos	Over 3500 free educational videos and/or clips with teachers' guides, blackline masters, and ties to AZ academic standards
K-12	All	www.asset.asu.edu Log in, then navigate to Marco Polo, Illuminations	Interactive lessons, standards, teacher tools, web resources for teaching math
6 -12	All	www.webmath.com/	Homework help; some portions not free
K-2	Addition; subtraction	www.schoolexpress.com/compsoft/software06.php	Lots of FREE math software for both Mac and Windows; can also find free software for other subject areas
K-4	Science connections to math; time; money; fractions	www.smart-estore.com/product_list.asp?StoreId=475476&CategoryId=96&i=0&c=SCH001&a=	Free CDs; you pay \$5.95 S & H; some titles available in Spanish
K-12	All	www.mathematicsmagazine.com/free_math_software.htm	Quiz Lab; Math dictionary; Algebra worksheet generator; basic arithmetic practice; online video lessons for trig; 3D graphing calculator
K-8	Operations, types of numbers	www.aaamath.com/	Interactive; practice skills
4-8	Consumer math;	www.lemonadegame.com	Students run a lemonade stand in a simulation of a real world business
K-12	All	www.mathsnet.net/	Math learning activities; free software; information for the math teacher
K-12	All	http://nlvm.usu.edu/en/nav/vlibrary.html	Interactive math activities

Math Software Resources – Requires Purchase

Name of Software	Math Area	Publisher
Geometer's Sketchpad	Geometry	Key Curriculum Press, http://www.keypress.com/sketchpad/
Accelerated Math	All	Renaissance Learning, http://www.renlearn.com/math.htm
TimeLiner	Data Presentation; Number Sense	Tom Snyder, http://www.tomsnyder.com/products/product.asp?SKU=TIMV50
Graph Club; Graph Master	Graphing; Data Analysis	Tom Snyder, http://www.tomsnyder.com/products/product.asp?SKU=GRP20 and http://www.tomsnyder.com/products/product.asp?SKU=GRAMAS
Base Ten Blocks	Counting, Adding, Subtracting, Number Sense	The Learning Box, http://www.learningbox.com/s_index.htm
Math Word Problems: Money; Careers; Sports; Travel	Problem Solving	Optimum Resource, http://www.stickybear.com/alltitles.html#math
Math Mysteries	Problem Solving	Tom Snyder, http://www.tomsnyder.com/products/product.asp?SKU=MATMAT
Tessellation Exploration	Geometry	Tom Snyder, http://www.tomsnyder.com/products/product.asp?SKU=TESEXP
Fizz & Martina's Math Adventures	Communication about math; problem solving; estimation	Tom Snyder, http://www.tomsnyder.com/products/product.asp?SKU=FIZFIZ
Algebra Solved! And Pre-Algebra Solved!	Algebra, Pre-Algebra	Bagatrix, http://www.bagatrix.net/
Fraction Shape Up	Fractions	Merit Software, http://www.meritsoftware.com/software/fraction_shape_up/index.html
Pre-Algebra Shape Up	Pre-Algebra	Merit Software, http://www.meritsoftware.com

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Various	Calculations; spreadsheet; functions; calculus; graphing;	freestatistics.altervista.org/math.php
Various	Long list of available math software titles	www.allsites.com/Top.Science.Math.Education.Software.html
Visual software titles	Algebra, Geometry, Trig	www.mathematicssoftware.com/

Digital Media & Math Instruction		
Website	URL	Description
Apple Learning Interchange	http://ali.apple.com/	Lesson ideas & examples for incorporating video and photos into instruction
Meaningful Digital Video for Every Classroom	http://www.techlearning.com/story/showArticle.jhtml?articleID=18700330	Helpful article on how to get started
Math Gallery	http://education.apple.com/education/ilife/subject_template.php?subject_id=3	Lesson ideas & examples using Apple's iLife suite
Digital Media in the Classroom	http://www.kn.pacbell.com/wired/fil/pages/listdigitalphe.html	Links to tutorials, photography tips, and use of digital video as a storytelling tool in any subject

Websites that address math instruction		
Title	URL	Comments
Bob Bowman's Math Links	www.user.shentel.net/rbowman/files/math.htm	140 linked sites that address various applications of math
Kathy Schrock's Guide for Educators	school.discovery.com/schrockguide/math.html	Extensive list of links to math lesson plans, activities, history for all ages
Lesson Plan Library	school.discovery.com/lessonplans/math.html	materials, procedures, assessments
SuperKids	superkids.com/aweb/tools/math/	K-6 math worksheet generator with answer keys
Ed Helper	www.edhelper.com/math.htm	K-12 math worksheet generator; test prep
AZ Dept of Ed	www.ade.state.az.us/standards/aims/sampletests/	Sample AIMS tests, 3-12

Educator's Reference Desk	www.eduref.org/cgi-bin/lessons.cgi/Mathematics	Lesson Plans for all areas of math K-12
Eisenhouer National Clearinghouse	www.enc.org/weblinks/lessonplans/math/	Lesson Plans for all areas of math K-12
SMILE Program Math Index	www.iit.edu/~smile/mathinde.html	Almost 200 math lesson plans in a wide variety of topics
Academy Curricular Exchange	www.ofcn.org/cyber.serv/academy/ace/	Click on one of 3 math links: elementary, intermediate, high school for math lesson plans

Online Math Tools		
Math Tool	Website	Comments
Online Calculators	www.math.com/students/tools.html	Includes a basic and scientific calculator as well as simple generators for prime numbers, square roots, area, percent, savings, and more.
Math Homework Help	www.mathnerds.com/mathnerds/	Does not provide answers; gives guidance and direction
Math Rules	www.gomath.com/formulatogo.html	Provides tables, math rules, formulas needed to work on math problems
Ask Dr. Math	www.mathforum.org/dr.math/	Ask a math expert questions
Worldwide Metric	www.worldwidemetric.com/metcal.htm	Conversion calculators for length, weight, pressure, volume, temperature
Print Free Graph Paper	www.printfreegraphpaper.com/	All types of graph paper in pdf format
Donna Young	http://math.donnayoung.org/	Print graph paper, clocks, math charts, coordinate grids, play money, fraction manipulatives
Handmade Math Manipulatives	http://mason.gmu.edu/~mmankus/Handson/manipulatives.htm	Create your own pattern blocks, base ten blocks, attribute blocks, rods, color tiles, fraction strips; also has printable graph paper

Math Textbook Publishers

Name of Publisher	Website Address	Online Classroom Resources
Harcourt	www.harcourt.com	www.harcourtschool.com/index.html
Glencoe	www.glencoe.com	www.glencoe.com/sec/math/index.html
Prentice Hall	www.phschool.com/	www.phschool.com/atschool/txtbk_res_math.html
Saxon	http://saxonpublishers.harcourtachieve.com	http://saxonpublishers.harcourtachieve.com/HA/resourcelist.aspx?ca=Online+Activities&SRC1=28&SRC5=saxonpublishers
McGraw-Hill	www.mcgraw-hill.com	www.mhln.com/UnregisterController?ACTION=POST&MANAGER=LOGON&OPERATION=LOGON&JSP=index.jsp
Houghton-Mifflin	www.hmco.com/index.html	none
Wright Group	http://www.wrightgroup.com/index.php/contentarea?contentArea=1	http://www.wrightgroup.com/index.php/home/freeactivities/mathematics/35

Math Rubrics

Website	Description
intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/RubricBank/MathRubrics.pdf	20 rubrics in pdf format
www.glade.net/%7Erletcher/RubricMath.htm	Math project rubric
www-ed.fnal.gov/help/97/sightsound/datarub.html	Data rubric
www.glade.net/%7Erletcher/RubricAlg1.htm	Algebra I rubrics with science connections
www.glade.net/%7Erletcher/RubricGeom.htm	Geometry rubrics with science connections
http://rubistar.4teachers.org/index.php	Rubric Generator – click on math link
http://instech.tusd.k12.az.us/rubrics/generator.html	Collection of links to various rubric generators
www.iwebquest.com/hotlists/mathrubric.htm	Links to various math problem solving rubrics
http://hale.pepperdine.edu/%7EInoguer/rubricsites.htm	Links to various types of educational rubrics

Real Time Data

Website Address	Description
http://k12science.ati.stevens-tech.edu/realtimedatasites.html	Links to a wide variety of realtime data sources (animals, astronomy, weather, earth science, oceanography, environmental, time zones)
http://spaceflight.nasa.gov/realdata/	NASA data for the space shuttle flight path; orbital tracking for the shuttle, ISS, and Russian space vehicles; weather data for the Kennedy Space Center
http://waterdata.usgs.gov/nwis/rt	USGS data for water resources and streamflow
http://k12science.ati.stevens-tech.edu/realtimeproj.html	Data on: Air Pollution; Navigational Vectors for Pilots; Ocean Navigation; Ocean Currents; Weather; Plate Tectonics
http://weather.communitycomputing.com/owl/realtime/index.asp	Weather data from all over the world
www.arctic.noaa.gov/data.html	NOAA data and climatic indices from the Arctic region
www.nodc.noaa.gov/GTSP/access_data/gtsp-p-rt.html	Global ocean temperature & salinity measurements
http://web.ladwp.com/~wsoweb/Aqueduct/realtime/realtimeindex.htm	Los Angeles aquaduct-waterflows, reservoir elevations
http://whale.wheelock.edu/Welcome.html	Whale data
http://volcano.und.nodak.edu/	Volcano data
www.jasonproject.org/	The JASON Project – studying rainforests
www.covis.nwu.edu/geosciences/resources/geology.html	Geosciences Data Resources
www.indo.com/distance/	Find the distance between any 2 places on the globe.
http://ippex.pppl.gov/analysis/	Internet Plasma Physics Education Experience - Analyze data from the Tokamak Fusion Test Reactor (offers 3 levels of difficulty)
www.cheaptickets.com/trs/cheaptickets/flighttracker/flight_tracker_home.xsl	Track flights across the US
http://finance.yahoo.com/?	Analyze stock quotes
www.dot.ca.gov/dist11/d11tmc/sdmap/mapmain.html	Traffic report data from all over the US – current conditions, speed of traffic, traffic camera data
www.ssec.wisc.edu/data/	Space Science & Engineering Center data
www.earthkam.ucsd.edu/	Satellite images taken of Earth from the ISS – interactive project with students
http://argo.kishou.go.jp/	Japan's Meteorological data
http://argo.kishou.go.jp/	Solar activity data
http://neic.usgs.gov/neis/bulletin/	Worldwide earthquake activity in the last 7 days
www.epa.gov/airnow/where/	Air quality data from around the USA

Using Literature in the Math Classroom

Website	Description
http://falcon.jmu.edu/~ramseyil/mathpict.htm	Article & bibliography discussing the use of children's literature to teach math
www.carolhurst.com/subjects/math/math.html	Links to ideas on how to use children's lit to teach math
http://everydaymath.uchicago.edu/educators/books.shtml	Literature resources by grade level for teaching math; lists books and publishers
www.ericdigests.org/2003-1/school.htm	Article discussing specific ways to use literature to teach math
www.mathcats.com/grownupcats/ideabankmathandliterature.html	List of links to various sites describing how to use literature to teach math; teacher resource book list
www.ictm.org/parents/literature.html	A long list of recommended books to use when teaching math, Grades PK-6
www.techteachers.com/mathweb/literatureandmath.htm	A list of links leading to teacher-created lesson plans using literature to teach math
http://users.anderson.edu/~roebuck/childlit.html	Resource booklist for teachers wishing to integrate literature; list of children's books
www.pace.edu/library/pages/instruct/birnbaum/msliteracy.htm	Links and booklists for teachers to use when integrating math and literature
http://dept.houstonisd.org/curriculum/earlychild/items/Math_Lit_Booklist.pdf	7 pages of children's book titles listed by math area; pdf format
http://csi.boisestate.edu/dmt/mathlit.htm	Long list of recommended lit books to use with math teaching, with descriptions; by grade level; NCTM standards frequently listed
www.ioncmaste.ca/homepage/resources/web_resources/math_lit_biblio.html	Books that can be used when teaching math; listed by math concept; includes publisher
www.edselect.com/mathbooksbowen.htm	Math picture books listed with description, recommended grade levels, usage
www.ioncmaste.ca/homepage/resources/web_resources/applied_math/MathBook_reviews.pdf	38 pages of books to use when teaching secondary math; includes descriptions, potential math activities, and teaching ideas; in pdf format
www.lindaslearninglinks.com/MathLiterature.html	Brief justification for using literature to teach math in primary grades, then lists specific books to teach particular math concepts, with activities included
www.towson.edu/~yarnev/Math%20and%20Lit%20List.html	Long list of teacher books and student books to use when teaching math through literature
www.sju.edu/libraries/drexel/lrgs/edmathlitrg.htm	Long list of teacher and student books

Research on Integrating Technology to Improve Math Achievement

Organization	Website	Description
ISTE (International Society of Technology in Education)	http://caret.iste.org/	Searchable database of articles relating technology to achievement
NCTM (National Council of Teachers of Mathematics)	http://www.nctm.org/	Includes math standards, activities, research, current issues, e-workshops
TIMS Study (Trends in International Math & Science)	http://isc.bc.edu/timss2003i/intl_reports.html	Obtain the 2003 report which supports a strong link between technology and math achievement