SOME Websites that are useful AND FUN :

<http://grapevine.abe.msstate.edu/~fto/tools/vol/index.html>

THIS WEB-SITE LETS YOU CALCULATE VOLUMES OF ALL SHAPES SO YOU CAN DO EXPERIMENTS WITH DIFFERENT DIMENSIONS.

FRACTALS

<http://www.shodor.org/master/fractal/software/Snowflake.html>

THIS WEBSITE LETS YOU GENERATE YOUR OWN FRACTALS USING A LINE WITH POINTS. YOU CAN SEE UP TO EIGHT ITERATIONS

<http://www.shodor.org/master/fractal/software/Sierpinski.html>

THIS WEBSITE ALLOWS YOU TO PLAY THE CHAOS GAME ONE POINT AT A TIME OR MANY POINTS AT A TIME. YOU WILL SEE THAT SERPINSKI’S TRIANGLE IS GENERATED.

<http://math.rice.edu/~lanius/fractals/sierjava.html>

this website allows you to generate serpinski’s trianglE BY ALLOWING THE COMPUTER TO DO ITERATIONS FOR YOU.

<http://math.rice.edu/~lanius/frac/antikoch/antikoch.html>

THIS WEBSITE ALLOWS YOU TO ITERATE THE ANTI-SNOWFLAKE—A PICTURE WE WILL RECOGNIZE AFTER THE FIRST ITERATION.

<http://micro.magnet.fsu.edu/primer/java/scienceopticsu/powersof10/index.html>

THIS WEB-SITE DEMONSTRATES THE EFFECT OF ENLARGING OR SHRINKING THINGS BY POWERS OF TEN. THE BASE-LINE IS A LEAF ON A TREE. IT REDUCES TO TINY CELLS AT ONE EXTREME AND INCREASES TO WAY OUT IN OUTERSPACE AT THE OTHER EXTREME.

<http://www.randomizer.org/form.htm>

allows you to select multiple sets of random numbers using varioususeful parameters. You may ask that no numbers be repeated-- a nice feature for certain problems.You may ask that the numbers be ordred. I like this web-site because I can picture using it to simulate many problems. For example I just ran 100 sets of 35 numbers out of 365 numbers to simulate the birthday problem. I asked for ordred sets of numbers so I could easily select the duplicates.

<http://www.educalc.net/144267.page>

This web-site teaches you how to use an abacus. Very nice and easy to understand.

BIRTHDAY PROBLEM:

<http://www-stat.stanford.edu/~susan/surprise/Birthday.html>

generates random birthdays for the birthday problem. You state the number of people in the classroom and the program generates the calendar.

<http://www.mste.uiuc.edu/reese/birthday/intro.html>

This site gives more details for the underlying mathematics plus recommendations for teachers.

<http://www.math.temple.edu/~paulos/>

John Allen Paulos web-site.

This is a rich web-site maintained by the author of many wonderful statistics books such as *Innumeracy, A Mathematician Reads the Newspaper, etc.* Paulos takes complex ideas and puts them into contexts that make them easy to understand. The site has links to talks, news of interest, problems, articles, and reviews of the author’s books.

CHALLENGE PROBLEM WEB S0URCE

<http://www.figurethis.org/challenges/c03/challenge.htm>

This site has challenge problems organized by grade levels with many extensions. All are downloadable.

HUMOROUS WEB-SITE

<http://video.google.com/videoplay?docid=7106559846794044495&q=ma+and+pa+kettle>

This web-site has a short vignette with Ma and Pa Kettle demonstrating that 25 divided by 5 is 14. An interesting algorithm.

<http://breeze5.umn.edu/didyouknow/>

This web-site discusses numbers showing how small our population is compared to China and India. It also talks about how much knowledge will change over the years and how small the site to contain it will be.

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| **iTEACH Math: Technology Tools and Resources**  [**http://www.neirtec.org/activities/iteach.htm**](http://www.neirtec.org/activities/iteach.htm) |

In collaboration NEIRTEC (Northeast and the Islands Regional Technology in Education Consortium) this online workshop presents technology tools and web-based materials that support middle school teachers of mathematics. The workshop explores a range of online math applets, management tools, web-based resources, lesson plans and projects that utilize technology to serve curricular goals. One of my favorites is the Fraction Bars Applet

**National Library of Virtual Manipulatives**

[**http://nlvm.usu.edu/en/nav/index.html**](http://nlvm.usu.edu/en/nav/index.html)

Large collection of platform independent, interactive, java applets and activities for K-12 mathematics.

**Statistics Case Studies**

[**http://www.stat.ucla.edu/cases/**](http://www.stat.ucla.edu/cases/)

Scenarios about issues in statistics. Some describe a situation and students can think about whether it makes sense. Others ask particular questions. Useful site for finding contextual situations

<http://www.milaadesign.com/wizardy.html>

Web-site useful for finding a number pattern to help you understand why the method works.

<http://www.shodor.org/interactivate/activities/AdvancedMontyHall/>

This website allows you to simulate Monty Hall with switches or staying, one at a time or multiple times to see the distribution. You may also vary the number of doors.

<http://www.uselectionatlas.org/TOOLS/evcalc.php>

Interactive map as election results come in.

<http://www.stat.tamu.edu/~west/applets/chisqdemo.html>

This web-site calculates the p-value for your Chi-square calculation

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| <http://www.draac.com/laughin/mind.html>  This is another wizard web-site whose pattern is related to base 2.  http://[www.conceptuamath.com/fractions.html](http://www.conceptuamath.com/fractions.html)  This is a web-site with virtual tools for learning and undertanding fractions. Great problems.  <http://www.lottogenie.com/html/odds.html>  This web-site calculates probabilities for varies lotto games. You select the size of the game as well as the size of the win.  <http://standards.nctm.org/document/eexamples/chap4/4.2/part2.htm#applet>  This web-site is a virtual geoboard that allows you to make polygons or any shape. It helps students to learn Pick’s Theorem by allowing them to experiment with many shapes. Students who have difficulty handling the rubber bands would be helped by this. |