### **Links to Numerous Activities**

http://www.abcya.com

http://www.coolmath-games.com

http://www.aaaknow.com

http://www.sheppardsoftware.com

# **Statistics and Probability**

**Create a Graph** - Use the table and label options to create various graphs. http://nces.ed.gov/nceskids/createAgraph/default.aspx

**Mean, Mode, and Range -** Practice the mean, range, and mode of given numbers by entering the correct values.

http://media.emgames.com/emgames/demosite/playdemo.html?activity=M5A006&activitytype=dcr&level=3

**Theme Park Favorites** - Answer the questions by interpreting data shown on a series of graphs. <a href="http://www.harcourtschool.com/activity/theme\_park\_favorites/">http://www.harcourtschool.com/activity/theme\_park\_favorites/</a>

**Data to Graphics -** Find the data and adjust graphic or graph displays to show the correct amounts. <a href="http://www.fedstats.gov/kids/mapstats/TableMap/Table\_Map8\_dlh.html">http://www.fedstats.gov/kids/mapstats/TableMap/Table\_Map8\_dlh.html</a>

**Experimental Probability** - Select a spinner or dice and the computer automatically tallies the frequency of the numbers/colors from computer generated spins of 5 or 10 times. http://www.shodor.org/interactivate/activities/ExpProbability/

**Dice Rolls -** Set the number of rolls for two dice and this site will automatically graph the results by the frequency of each number total. <a href="http://nces.ed.gov/nceskids/chances/">http://nces.ed.gov/nceskids/chances/</a>

## Money

**Making Change** - Select the bills and coins to receive as change for purchases. http://www.mathplayground.com/Making\_Change.html

**Cash Out -** Click on the correct change for multiple customers. Levels can be set to make this increasingly difficult.

http://www.mrnussbaum.com/cashout/index.html

# **Algebraic Relationships**

**Interactive Coordinate Grid -** Mark points on the grid with the aid of coordinate markers on or off. Also convert from single quadrant to four quadrant grid.

http://smartboards.typepad.com/smartboard/files/coordinates1.swf

**Function Machine -** One or two "tubes" perform chosen operations on a set of numbers. Students must figure out the operations done to arrive at the final output. This can be quite challenging according to your settings.

http://www.teacherled.com/resources/functionmachine/functionmachineload.html

**Feed Billy Bug -** Move the bug to the coordinates on the grid to feed. <a href="http://www.primarygames.co.uk/pg2/bug2/bug2.html">http://www.primarygames.co.uk/pg2/bug2/bug2.html</a>

### Measurement

**The Ruler Game** - Select the position on the ruler that shows given measurements. This can be set from whole inches to sixteenths in measurements. It can be timed or without timing. <a href="http://www.rsinnovative.com/rulergame/">http://www.rsinnovative.com/rulergame/</a>

**Measure Inches/Superbrain** - Multiple choice answers are given for a line's measurement to sixteenths of an inch. There are also more basic measurement options. http://www.funbrain.com/cgi-bin/meas.cgi?A1=s&A2=0&A3=3

**Measure Dartboard** - Adjust the options for weight, length, and capacity to add together amounts to make the targeted amount correct. Can be timed. (slow to load)

<a href="http://www.wmnet.org.uk/wmnet/custom/files\_uploaded/uploaded\_resources/852/measuresv2.swf">http://www.wmnet.org.uk/wmnet/custom/files\_uploaded/uploaded\_resources/852/measuresv2.swf</a>

**Sal's Sub Shop** - Cut the sub to the appropriate measure up to 1/8" and add ingredients to earn money.

http://www.mrnussbaum.com/sal/index.html

**Area and Perimeter** - This site has step-by-step directions for area and perimeter calculations. An online ruler is used to measure sides of rectangles. http://www.mathplayground.com/area\_perimeter.html

**Area and Perimeter Grid** - Areas and perimeters are calculated and compared using grid line objects.

http://www.shodor.org/interactivate/activities/ShapeExplorer/?version=1.5.0 19&browser=safari&vendor=Apple Computer, Inc.&flash=10.0.32

**Area and Perimeter Challenges** - Irregular polygons are introduced and illustrated in this site's initial tutorial. Challenge activities calculating complex areas and perimeters are also provided. <a href="http://www.bgfl.org/bgfl/custom/resources">http://www.bgfl.org/bgfl/custom/resources</a> ftp/client ftp/ks2/maths/perimeter and area/index.html

**Surface Area and Volume -** Find the volume of the block with your variable settings of height, width, and depth.

http://www.shodor.org/interactivate/activities/SurfaceAreaAndVolume/

**Area of Triangles -** Find the area of random triangles measured on a background grid. http://www.shodor.org/interactivate/activities/TriangleExplorer/

Balancing Animals with Weights (kg) - Use a series of weights on a balance scale to measure weights in metric units.

http://wmnet.gfl.iboard.co.uk/activity/maths/ku4BP7tZ8nj6eS9NvPimG

**Elapsed Time Practice -** Advance the hour and minute hand on clocks or digital displays to show the specified time. Easy to challenging levels are included.

http://www.shodor.org/interactivate/activities/ElapsedTime/?jv=Mac&jb=Mozilla/5.0%20(Macintosh; %20U;%20PPC%20Mac%20OS%20X;%20en-us)%20AppleWebKit/312.8%20(KHTML,%20like %20Gecko)%20Safari/312.6

**Elapsed Time Quiz -** Select the correct answer to challenging elapsed time problems. http://marg.mhost.com/MathGr5/elapsedtime.htm

**Stop the Clock!** - Match digital with analog clock faces in as short a time as possible. Levels provide more challenging practice to the nearest minute. http://www.teachingtime.co.uk/

**Clockworks! -** Set the hour and minute hands of the clock to the given digital time. Levels of difficulty can be set.

http://www.mrnussbaum.com/clockworks/index.html

## Geometry

**Transformations** - Illustrates the symmetry slides, flips and reflections <a href="http://www.mathsisfun.com/geometry/transformations.html">http://www.mathsisfun.com/geometry/transformations.html</a>

**Symmetry Artist** - Try drawing and polygons using rotational or reflective symmetry using this online drawing/art program.

http://www.mathsisfun.com/geometry/symmetry-artist.html

**Lines of Symmetry -** Identify how many lines of symmetry each shape has. http://www.innovationslearning.co.uk/subjects/maths/activities/year3/symmetry/shape\_game.asp

**Banana Explorer -** Set the angle to hunt for bananas. The closer to the correct setting, the better the reward.

http://www.primarygames.co.uk/pg2/bhunt/bhunt.html

**Guess the Random Angle -** Set the angle with the controls or randomly. A protractor can be toggled on or off for estimating angle measure.

http://www.crickweb.co.uk/assets/resources/flash.php?&file=angle

**Aim The Angle for Squirt Hose -** Enter the correct angle to hose down a variety of objects <a href="http://www.bbc.co.uk/schools/ks2bitesize/maths/shape\_space/angles/play.shtml">http://www.bbc.co.uk/schools/ks2bitesize/maths/shape\_space/angles/play.shtml</a>

What's My Angle - Teacher set controls allow a variety of angle measurements setting limits on degree of difficulty.

http://www.amblesideprimary.com/ambleweb/mentalmaths/protractor.html

**Angle Measures -** Use the protractor to measure angles.

http://www.teacherled.com/resources/anglemeasure/anglemeasureload.html

**Alien Angles -** Use a slider to set an angle to fire a missile at an alien. If close enough to the actual angle, points are scored.

http://www.mathplayground.com/alienangles.html

**Shape Sorter -** Use Venn Diagrams to drag shapes into the correct category according to selected rules

http://illuminations.nctm.org/ActivityDetail.aspx?ID=34

# Fractions, Decimals, and Percents

**Fraction Tiles** - A fraction tile "wall" can be used to show equivalent forms by comparing fraction tile sizes. <a href="http://www.abcya.com/fraction\_tiles.htm">http://www.abcya.com/fraction\_tiles.htm</a>

**Fraction Bars** - These bars compare the fractional, ratio, percentage, and decimal equivalents of created fractions. Were developed as part of UK numeracy strategy project. http://www.echalk.co.uk/Maths/dfes\_numeracy/Assets/fractions\_flash.swf

**Name the Fraction -** Shown a shape split into fractional parts, enter the numerical fractional value. A check button shows if you are correct.

http://nlvm.usu.edu/en/nav/frames asid 104 g 2 t 1.html?from=grade g 2.html

**Single Fraction Pointer -** Construct a square or circle model of a fraction by adding sections and coloring the fractional part.

http://shodor.org/interactivate/activities/SingleFractionPoint/

**Comparing Two Fractions -** Enter two fractions for comparison, and the site will show the two and which is larger. <a href="http://www.webmath.com/k8cf.html">http://www.webmath.com/k8cf.html</a>

**Greater or Less Than Fraction Comparison** - Compare two presented fractions by selecting the greater, less, or equal sign. The fractions are displayed on a number after correct selection. <a href="http://www.visualfractions.com/CompareL/comparel.html">http://www.visualfractions.com/CompareL/comparel.html</a>

**Fractional Parts of a Group -** This set of worksheets involve identifying the number of a group that represent a fractional part i.e. 1/6 of 24 equals 4

http://www.bbc.co.uk/skillswise/numbers/fractiondecimalpercentage/fractions/fractionsofquantities/worksheet.shtml

**Equivalent Fractions** - Build equivalent fractions using a square or circle model and setting the divisions to the correct position. Fill in the sections for the equivalent value by rotating or clicking and filling the sections. A table records all correct responses, showing equivalent forms. http://illuminations.nctm.org/activitydetail.aspx?id=80

**Fraction Jeopardy -** Teams can figure out the addition, subtraction, multiplication, or division problems.

http://www.math-play.com/Fractions-Jeopardy/fractions-jeopardy.html

**Lowest Terms -** Shown a circle fractional diagram, the fraction must be entered in lowest terms on the page.

http://www.visualfractions.com/RenameLowestC/renamelowestC.html

**Equivalent Fractions** - Select equivalent fractions from the six pairs shown on the screen. <a href="http://www.sheppardsoftware.com/mathgames/fractions/memory\_equivalent1.htm">http://www.sheppardsoftware.com/mathgames/fractions/memory\_equivalent1.htm</a>

**Adding Mixed Numbers** - Presented problems with like denominators have to have answers entered. The series of problems is timed and recorded at the end of the session. http://www.aaaknow.com/fra66dx2.htm

**Subtracting Mixed Numbers -** Complete the answer to example problems by entering the mixed number amount. The timer keeps track of length of time needed to answer. http://www.aaastudy.com/fra66ex2.htm

**Subtracting Mixed Numbers with Borrowing -** A nicely presented tutorial that demonstrates borrowing for mixed number subtraction. Has several examples to try after demo. http://www.wisc-online.com/objects/ViewObject.aspx?ID=abm701

**Change Improper Fractions to Mixed Numbers -** Enter the mixed number from the improper fraction amount shown.

http://www.visualfractions.com/MixedLines/mixedlines.html

**Change Mixed Numbers to Improper Fractions -** Given a whole or mixed number, identify the improper fraction that can be made.

http://www.visualfractions.com/MixedtoFracC/mixedtofrCircles.html

**Ordering Decimals -** Order the decimals from smallest to largest by dragging the decimals to the appropriate positions.

http://www.bbc.co.uk/schools/ks2bitesize/maths/number/decimals/play.shtml

**Ordering Decimals with Whole Numbers -** A more challenging ordering that includes decimals and whole numbers with decimals.

http://www.citycol.com/basic\_skills/Quizzes/Maths/decord1.htm

**Ordering Decimals -** Place the decimals in the correct order by dragging the numbers to the correct position. Can be timed.

http://www.mathsisfun.com/numbers/ordering-game.php

# **Number Operations**

**Math Facts** - You set the operation, level, and length of timing for randomly presented addition, subtraction, multiplication, or division problems. A summary shows answers correct and seconds per problem average.

http://www.playkidsgames.com/games/mathfact/default.htm

**Estimation and Rounding -** Activities and games to practice estimation and rounding. Basic to advanced activities.

http://www.mrnussbaum.com/rounding.htm

**Rounding Decimals -** Round complex numbers to a variety of decimal amounts. <a href="http://www.aaamath.com/g5-dec-round.htm">http://www.aaamath.com/g5-dec-round.htm</a>

**Connect Sums -** Select two to four cards, dice, or coins to make correct sums. The accumulated value of score is timed or totaled.

http://www.carstensstudios.com/mathdoodles/connectsums.html

**Power Line Totals -** Place the numbers in the correct sequence on a five number grid to make a similar total in all directions.

http://www.primarygames.co.uk/pg2/powerlines1.html

**Sum Sense -** Choose from a five or six digit group the numbers that make an equation. <a href="http://resources.oswego.org/games/SumSense/sumadd.html">http://resources.oswego.org/games/SumSense/sumadd.html</a>

**Speed Grid Challenge** - Select the numbers from the grid of 12 to make a given sum. http://resources.oswego.org/games/SpeedGrid/Addition/urikares.html

**Venn Diagrams -** Order the multiples according to which groups they belong. After dragging the numbers in position a check is performed.

http://www.crickweb.co.uk/ks2numeracy-properties-and-ordering.html

**100 Number Chart -** Toggle options allow highlighting and changing number square colors and starting point.

http://www.crickweb.co.uk/ks2numeracy-tools.html

**Multiplication Table -** Highlight the rows and columns and this chart displays the problem and answer.

http://www.mathsisfun.com/tables.html

**Math Trainer -** Shows problems in categories according to difficulty with choice of operations. Complete answer and the fact is checked off.

http://www.mathsisfun.com/numbers/math-trainer-multiply.html

**Practice Math Exercises -** Practice activities on a wide assortment of math skills. <a href="http://www.thegreatmartinicompany.com/">http://www.thegreatmartinicompany.com/</a>