



Everyday Mathematics® eToolkit

INTRODUCTION

OVERVIEW

The eToolkit is a unique collection of interactive virtual manipulatives and backgrounds that you may find useful as you teach *Everyday Mathematics*®. It is intended for teacher-directed instruction on an interactive whiteboard. It is designed so students can interact with the digital materials under teacher direction during class. If you don't have an interactive whiteboard, you can still project the eToolkit on a screen or wall with a computer connected to a projector.

Many *Everyday Mathematics* activities ask students to model mathematical concepts using manipulatives at their desks. This eToolkit is not meant to replace real manipulatives; rather, it is intended to be used in conjunction with real manipulatives. The eToolkit is designed to help the teacher (and students) demonstrate concepts and/or solutions to a class or small group in an organized way.

The eToolkit can be used with grades Pre-K–6. Many eTools are modeled after the real manipulatives used in the classroom. The backgrounds are reproduced from the Teaching Aid Masters in the *Math Masters* book. The eToolkit may complement any interactive whiteboard activity, including many of the *Everyday Mathematics* ePresentations.

QUICK START

1. Select your grade level from the top drop-down menu



. This will help you choose grade-appropriate backgrounds and eTools.

2. Select a background from the Backgrounds drop-down menu



The backgrounds are reproduced from the Teaching Aid Masters in the *Math Masters* book and are ordered alphabetically by topic. To remove the background and reset it to a blank



(white) workspace, click the button on the bottom Toolbar. (Note: When you first open the eToolkit, backgrounds for all of the grades are listed in the drop-down menu. Select a specific grade level to filter the backgrounds for that grade.)

3. Select an eTool from the eTools drop-down menu



(Note: When you first open the eToolkit, eTools for all of the grades are listed in the drop-down menu. Select a specific grade level to filter the eTools for that grade.)

4. To increase the size of the workspace, you can hide the Menu Bar at the left of



the screen and/or the Toolbar at the bottom of the screen. Click the icon to



hide a bar. Click the icon to show a bar.

MINIMUM SYSTEM REQUIREMENTS:

Operating Systems/Hardware

Apple Macintosh: OS X 10.4, 10.5, or 10.6

Microsoft Windows: XP, Vista, or Windows 7

Internet Browsers

Apple Macintosh: Safari 3.x or 4.x

Microsoft Windows: Microsoft Internet Explorer 7.0 or later, Firefox 3.x

Shared Specifications

T1 for school implementation

Other Requirements

Macromedia Flash Player: Version 10.0

Table of Contents (Click on each link below to take you to that section.)

Toolbar

- [Hand](#)
- [Text](#)
- [Pen](#)
- [Segment](#)
- [Compass](#)
- [Protractor](#)
- [Calculator](#)
- [Stopwatch](#)
- [Timer](#)
- [Other Functions](#)

eTools

- [+, – Facts Table](#)
- [×, ÷ Facts Table](#)
- [2D Shapes Library](#)
- [3D Shapes Library](#)
- [Array Builder](#)
- [Attribute Blocks](#)
- [Base-10 Blocks](#)
- [Base-10 Blocks – Flat](#)
- [Bucket Balance](#)
- [Card Decks](#)
- [Clock Models](#)
- [Connecting Cubes](#)
- [Coordinate Grid](#)
- [Counters](#)
- [Counters \(Two-Color\)](#)
- [Counting Sticks](#)
- [Dice](#)
- [Dominoes](#)
- [Fraction Models](#)
- [Geoboard](#)
- [Money](#)
- [Number Grid](#)
- [Pattern Blocks](#)
- [Spinner](#)
- [Tangrams](#)
- [Thermometer](#)

TOOLBAR

HAND: Use the Hand eTool to select and manipulate eTools and other objects in the workspace.



1. Click the  button in the Toolbar.
2. Click an eTool or object in the workspace to select it.
3. Once an object is selected you can move, rotate, resize, or delete it. Depending on the type of eTool, objects can also be manipulated in other ways.

[BACK TO TOP](#)

TEXT: Use the Text eTool to add text to the work area.



1. Click the  button in the Toolbar.
2. Select a text color in the Toolbar.
3. Click anywhere in the workspace to add a text box.
4. Enter your text with the keyboard.
5. Click anywhere outside the text box to deselect the Text eTool.
6. Note: You can use the Text eTool to create new and/or edit existing text. You can use the Hand eTool to move text boxes in the workspace.

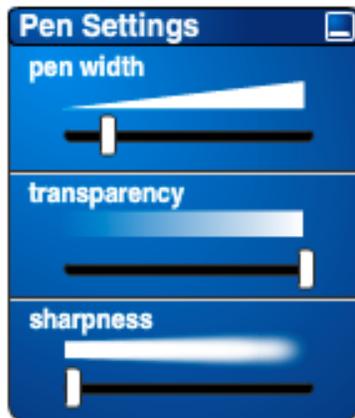
[BACK TO TOP](#)

PEN: Use the Pen eTool to draw in the workspace.



1. Click the  button in the Toolbar.

2. Select a pen color in the Toolbar.
3. Set the pen width, transparency, and sharpness.



4. Click and drag to draw in the workspace.
5. Note: You can use the Hand eTool to select a pen drawing and rotate it, move it to another location in the workspace, or drag it to the trash bin to delete it.

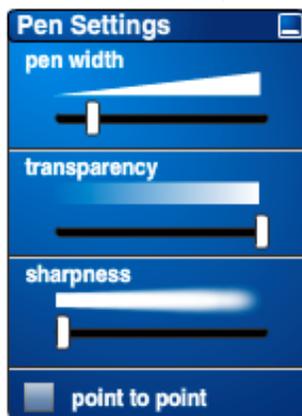
[BACK TO TOP](#)

SEGMENT: Use the Segment eTool to draw segments in the workspace.

Drawing Segments



1. Click the  button in the Toolbar.
2. Select a segment color in the Toolbar.
3. Set the width, transparency, and sharpness of the segment.



4. Click and drag to draw a segment in the workspace.

Drawing Connected Segments

1. To create connected segments, click the point to point checkbox in the Pen Settings menu.
2. Click on a starting point in the workspace to initiate your first segment. Then click on another point in the workspace to complete your first segment. Click on another point in the workspace to connect a second segment to the endpoint of the first segment. Continue clicking on points to draw new segments that are connected to the endpoints of previous segments. To complete your connected-segment drawing, click on the starting point of your first segment in the series to close a figure, click on the endpoint of your last-



drawn segment, or click on the button in the toolbar.

3. Note: You can complete an angle or other non-polygon connected-segment drawing by pointing to the final endpoint (which will become circled) and clicking again.
4. Note: You can use the Hand eTool to select a segment (or connected segments) and rotate it, move it to another location in the workspace, or drag it to the trash bin to delete it.

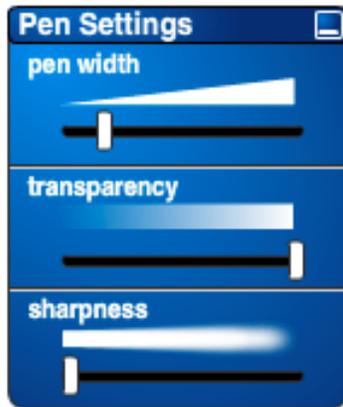
[BACK TO TOP](#)

COMPASS: Use the Compass eTool to draw circles.



1. Click the button in the Toolbar.
2. Select a pencil color in the Toolbar.

3. Set the width, transparency, and sharpness of the pencil.



4. Click and drag the anchor arm of the Compass to set the center of the circle.

5. Click and drag the pencil arm of the Compass to set the radius of the circle.

6. Click and drag the pencil in a circular motion to draw the circle. The center of the circle is marked with a point.

[BACK TO TOP](#)

PROTRACTOR: Use the full-circle and half-circle Protractor eTool to measure angles and create angles and/or rays in the workspace.

Measuring Angles



1. Click the  button in the Toolbar to display the half-circle Protractor. Click

the  button to display the full-circle Protractor and the

 button to return to the half-circle Protractor.

2. Click and drag the Protractor to the desired location.

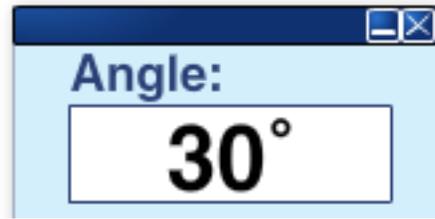


3. Click the  icon to rotate the Protractor and measure an existing angle

using the inner scale. Click the  button to flip the

Protractor. This allows you to measure angles with the outer scale of the Protractor.

4. You can click and drag the red line to measure an angle. The measurement is



displayed in the angle read-out box.



5. Click the  button to reset the red angle line and the

orientation of the Protractor. You can also click on the  button to hide the angle read-out box.



6. Click the  button or the  button on the Toolbar to hide the Protractor.

Creating Angles

1. Click in the text box and enter the angle measure desired. Then click the



 button to display the angle. You can also click and drag the red angle line to the desired angle measure and then click the



 button to display the angle.

2. Note: You can use the Hand eTool to select an angle and rotate it, move it to another location in the workspace, or drag it to the trash bin to delete it.

Creating Rays

1. Click and drag the red angle line to a desired position and then click the



 button to display the ray.

2. Note: You can use the Hand eTool to select an angle and rotate it, move it to another location in the workspace, or drag it to the trash bin to delete it.

[BACK TO TOP](#)

CALCULATOR: Use the Calculator eTool to perform calculations.



1. Click the  button in the bottom Toolbar.
2. Click and drag the Calculator to the desired location using the blue bar at the top of the calculator.
3. Click on the buttons to perform calculations to display on screen.
4. To remove the Calculator eTool from the workspace, click the calculator button on the Toolbar.

[BACK TO TOP](#)

STOPWATCH: Use the Stopwatch eTool to time events.

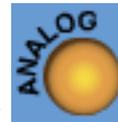


1. Click the  button to display the Stopwatch. You can switch between a

digital version and analog version by clicking on the



or



button.

2. Click the Start, Stop, and Reset buttons to control the Stopwatch. The  keeps track of the minutes elapsed. On the digital stopwatch, the Lap button keeps track of lap times.



3. Click the  button or the  button on the Toolbar to hide the Stopwatch. The Stopwatch continues to run when it is hidden so you may want to stop it before you close it.

[BACK TO TOP](#)

TIMER: Use the Timer eTool to set a countdown timer.



1. Click the  button to display the Timer.
2. Click and drag the dial clockwise to set the Timer. To set the Timer for more than one minute, drag the dial one complete rotation clockwise for each minute.
3. The Timer will start immediately after you set it. When the set time elapses, the Timer will ring.



4. Click the  button or the  button to hide the Timer. The Timer continues to run when it is hidden so you may want to stop it before you close it.

[BACK TO TOP](#)

OTHER FUNCTIONS:



Help Menu Button: Click the  button to view this help information.



Remove Background Button: Click the  button to remove the current background. The remove background button does not remove the existing eTools from the workspace.



Clear Objects Button: Click the  button to clear all eTools, text boxes, and/or pen drawings from the workspace. The clear objects button does not remove the existing background from the workspace.



Print Button: Click the  button to print the workspace. Printing a page allows you to record any eTools, backgrounds, text boxes, and/or pen drawings in the workspace. The eToolkit does not provide the ability to save an electronic version of your work.



Trash Bin: Drag eTools, text boxes, and pen drawings to the  to permanently remove them from the workspace.

[BACK TO TOP](#)

ETOOLS

+, – Facts Table

1. Click and drag the +, – Facts Table to the workspace.
2. Click at top of the columns, at left of the rows, or on individual numbers to highlight a fact.

 **Show Fact Family**

3. Click the  or

 **Hide Fact Family**

button to view or hide corresponding fact families.



4. To resize a Facts Table, use the  eTool to select it. Then click the



icon to increase the size or the



icon to decrease the size.



5. To remove a Facts Table from the workspace, click the  button on the Toolbar. You can also drag the Facts Table into the trash bin.

[BACK TO TOP](#)

×, ÷ Facts Table

1. Click and drag the ×, ÷ Facts Table to the workspace.
2. Click at top of the columns, at left of the rows, or on individual numbers to highlight a fact.

3. Click the  or  button to view or hide corresponding fact families.

4. To resize a Facts Table, use the  eTool to select it. Then click the  icon to increase the size or the  icon to decrease the size.

5. To remove a Facts Table from the workspace, click the  button on the Toolbar. You can also drag the Facts Table into the trash bin.

[BACK TO TOP](#)

2D Shapes Library

1. Select a subset of 2D Shapes: , , , and/or .

2. Click and drag the selected 2D Shape to the workspace.

3. Once a 2D Shape is in the workspace, you can use the  eTool to move it to another location.

4. To rotate a 2D Shape, use the  eTool to select it. Then click and drag the  icon.

5. To resize a 2D Shape, use the  eTool to select it. Then click the  icon to increase the size or the  icon to decrease the size.

6. To remove a 2D Shape from the workspace, click the  button on the Toolbar. You can also drag the 2D shape into the trash bin.

[BACK TO TOP](#)

3D Shapes Library

1. Click and drag the 3D Shapes Library to the workspace.
2. Select a type of 3D shape using one of the three tabs,

,
, or , at the top of the eTool.

Prisms and Cylinders or Pyramids and Cones

1. In the Prisms and Cylinders or Pyramids and Cones tab, choose the shape of base using the drop down menu.
2. Set the shape's Base Edge length using the slider, up/down arrows, or a keyboard to enter a number from 1 to 10. Set the Radius for a shape with a circle base.
3. Set the shape's Height using the slider, up/down arrows, or a keyboard to enter a number from 1 to 10.

4. Show the shape's Area of Base, Lateral Area, Surface Area, and/or Volume by clicking the check boxes.
5. Click and drag the shape to rotate it.
6. Unfold the shape to display a net by using the slider at the bottom of the workspace. Note: shapes with a circle base cannot be unfolded.

Spheres

1. Set the sphere's Radius using the slider, up/down arrows, or a keyboard to enter a number from 1 to 10.
2. Show the sphere's Surface Area and/or Volume by clicking the check boxes.

[BACK TO TOP](#)

Array Builder

1. Click and drag the Array Builder to the workspace.
2. Choose the number of rows and columns of the array using the up/down arrows. You can also enter the number of rows and columns with a keyboard using the values 1 to 12.
3. Choose a shape and color for the array.



4. Click the  button to build the array. Note: you can change the attributes of individual items in the array by clicking on the item and clicking a new shape and/or color.



5. To resize the Array Builder, use the  eTool to select it. Then click the



icon to increase the size or the



icon to decrease the size.



6. To remove the array builder from the workspace, click the  button on the Toolbar. You can also drag the Array Builder into the trash bin.

[BACK TO TOP](#)

Attribute Blocks

1. Select a shape from the menu of shapes at the top.
2. Choose a color for your Attribute Block from the Colors list at the bottom.
3. Click and drag the Attribute Block to the workspace.



4. Once an Attribute Block is in the workspace, you can use the  eTool to move it to another location. (Note: Since this eTool is based on the physical attribute blocks manipulative, the Attribute Blocks in this eTool are not scalable.)



5. To rotate an Attribute Block, use the  eTool to select it. Then click and



drag the  icon.



6. To change the color of an Attribute Block in the workspace, use the  eTool to select it. Then click the appropriate color from the available choices.



7. To remove an Attribute Block from the workspace, click the  button on the Toolbar. You can also drag an Attribute Block into the trash bin.

[BACK TO TOP](#)

Base-10 Blocks

1. Click and drag cubes, longs, flats, or big cubes to the workspace.



2. Once a Base-10 Block is in the workspace, use the  eTool to move it to another location.



3. To disconnect Base-10 Blocks, click the  icon. Disconnecting a long will separate it into 10 cubes. Disconnecting a flat will separate it into 10 longs. Disconnecting a big cube will separate it into 10 flats.
4. Connect Base-10 Blocks by combining one block with another. You can connect single cubes to other single cubes or partial longs. Up to 10 cubes can be connected together. You can connect single longs to other single longs or partial flats. Up to 10 longs can be connected together. You can connect single flats to other single flats or partial big cubes. Up to 10 flats can be connected together.



5. To remove a Base-10 Block from the workspace, click the  button on the Toolbar. You can also drag a Base-10 Block into the trash bin.

[BACK TO TOP](#)

Base-10 Blocks – Flat

1. Click and drag cubes, longs, and/or flats to the workspace.



2. Once a Base-10 Block is in the workspace, use the  eTool to move it to another location.



3. To disconnect Base-10 Blocks, click the  icon. Disconnecting a long will separate it into 10 cubes. Disconnecting a flat will separate it into 10 longs.
4. Connect Base-10 Blocks by combining one block with another. You can connect single cubes to other single cubes or partial longs. Up to 10 cubes can be connected together. You can connect single longs to other single longs or partial flats. Up to 10 longs can be connected together.



5. To remove a Base-10 Block from the workspace, click the  button on the Toolbar. You can also drag a Base-10 Block into the trash bin.

[BACK TO TOP](#)

Bucket Balance

1. Click and drag a Bucket Balance to the workspace.



2. Once a Balance is in the workspace, you can use the  eTool to move it to another location.

3. Click and drag the weight of your choice into a bucket on either side of the Balance.

4. To remove a weight from a bucket, simply click on the weight you wish to remove.



5. To remove a Balance from the workspace, click the  button on the Toolbar. You can also drag the Balance into the trash bin.

[BACK TO TOP](#)

Card Decks (Everything Math Deck, Fractions/Decimals/Percents Deck, Money Deck, Number Card Deck, Time Deck)

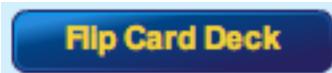
1. Select a Card Deck. Then click and drag it to the workspace.

2. Use the drop-down menu to choose a card subset.

A blue button with rounded corners and a yellow border, containing the word "Shuffle" in yellow text.

3. Click the  button to shuffle the Card Deck or selected subset.

A blue button with rounded corners and a yellow border, containing the text "Flip Card Deck" in yellow text.

4. Click the  button to flip the stacked deck over to show the other side of the cards before they are dealt.

5. Click and drag the cards onto the workspace.

a. On the Fractions/Decimals/Percents Deck, Money Deck, Number Card Deck,

A blue button with rounded corners and a yellow border, containing the text "Deal face-up" in yellow text.

and Time Deck, select the  check box to automatically deal the top card face-up when it is clicked and dragged onto the workspace. Note: If the deck has been flipped so it is face up, this check box will be disabled.

- b. On the Everything Math Deck, select the **Deal other side up** check box to automatically flip the top card when it is clicked and dragged onto the workspace.



6. On the workspace, click the  icon on an individual card to flip the card.

Clear Cards

7. Click the  button to remove all dealt cards from the workspace. To clear an individual card from the workspace, click the  icon.

Reset Card Deck

8. Click the  button to reset the card deck and move all cards back into the original deck.



9. To remove a Card Deck from the workspace, click the  button on the Toolbar. You can also click the  button.

[BACK TO TOP](#)

Clock Models

1. Click and drag a Clock to the workspace.



2. Once a Clock is in the workspace, you can use the  eTool to move it to another location.



3. To resize a Clock, use the  eTool to select it. Then click the  icon to increase the size or the  icon to decrease the size.



4. On the Analog Clock, click and drag the black minute hand to change the time. On the Digital Clock, use the hour and minute buttons to change the time.

5. Click the  button to switch to a Digital Clock. Click the  button to switch to the Analog Clock.



6. To remove a Clock from the workspace, click the  button on the Toolbar. You can also drag a Clock into the trash bin.

[BACK TO TOP](#)

Connecting Cubes

1. Click and drag one or more Connecting Cubes to the workspace.



2. Once a Connecting Cube is in the workspace, use the  eTool to move it to another location.
3. Connect cubes by combining one cube with another. To connect an individual cube to a train of cubes, drag the individual cube to either end of the train.



4. To disconnect a train of cubes, click the  icon between the cubes. This will disconnect the cubes at that point in the train.



5. To change the color of a cube in the workspace, use the  eTool to select the cube. Then click the appropriate color from the available choices. Note: You can only change the color of individual cubes.



6. To remove a Connecting Cube or train from the workspace, click the  button on the Toolbar. You can also drag the Connecting Cube or train into the trash bin.

[BACK TO TOP](#)

Coordinate Grid

1. Click and drag a Coordinate Grid to the workspace.
2. You can click the appropriate radio button to view either a First-Quadrant Grid or a Four-Quadrant Grid.
3. Select a color to highlight points and coordinate pairs.
4. To plot a point on the graph, click on the nearest half unit on the coordinate grid or enter the coordinate pair in the table. You can add points to the grid by entering values in the x , y table or using the up/down arrows and clicking the



button. Hover over the points on the grid to show the coordinate pairs.

5. To hide the points in the grid or in the table, click the



or the



check boxes.



6. Click the button to clear the grid and table of points and coordinate pairs.



7. To remove the Coordinate Grid from the workspace, click the button on the Toolbar. You can also drag the Coordinate Grid into the trash bin.

[BACK TO TOP](#)

Counters

1. Click and drag a Counter to the workspace.



2. Once a Counter is in the workspace, use the eTool to move it to another location.

3. To rotate a Counter, use the  eTool to select it. Then click and drag the  icon.

4. To resize a Counter, use the  eTool to select it. Then click the  icon to increase the size or the  icon to decrease the size.

5. To remove a Counter from the workspace, click the  button on the Toolbar. You can also drag a Counter into the trash bin.

[BACK TO TOP](#)

Counters (Two-Color)

1. Click and drag a Two-Color Counter to the workspace.

2. Once a Counter is in the workspace, use the  eTool to move it to another location.

3. To rotate a Counter, use the  eTool to select it. Then click and drag the  icon.

4. To resize a Counter, use the  eTool to select it. Then click the  icon to increase the size or the  icon to decrease the size.

5. To turn over a Counter, use the  eTool to select it. Then click the  icon.

6. To remove a Two-Color Counter from the workspace, click the  button on the Toolbar. You can also drag a Two-Color Counter into the trash bin.

[BACK TO TOP](#)

Counting Sticks

1. Click and drag a single Counting Stick or group of 5 Counting Sticks to the workspace.
2. Once a Counting Stick (or group of Counting Sticks) is in the workspace, use the  eTool to move the Counting Stick(s) to another location.
3. To group Counting Sticks, drag a stick or group of sticks onto another stick or group of sticks. Up to 5 sticks can be grouped together.
4. To ungroup Counting Sticks, click the  icon. Ungrouping separates the group into individual Counting Sticks.

5. To remove a Counting Stick or group of Counting Sticks from the workspace,



click the button on the Toolbar. You can also drag a Counting Stick or group of Counting Sticks into the trash bin.

[BACK TO TOP](#)

Dice

1. Click and drag a Die to the workspace.



2. Once a Die is in the workspace, use the eTool to move it to another location.



3. To resize a Die, use the eTool to select it. Then click the



icon to increase the size or the



icon to decrease the size.

4. To roll a Die, use the



eTool to select it. Then click the



icon to roll the Die.

5. When more than one Die is in the workspace, click the

Roll All Dice

button to roll all Dice simultaneously.



6. To remove a Die from the workspace, click the button on the Toolbar. You can also drag an individual Die into the trash bin.

[BACK TO TOP](#)

Dominoes

1. Select a Domino type from the menu at the top.
2. Click and drag a Domino to the workspace.



3. To rotate a Domino, use the  eTool to select it. Then click and drag



the  icon. Click the check box in the menu bar to rotate the Dominoes in 90° increments.



4. To remove a Domino from the workspace, click the  button on the Toolbar. You can also drag individual Dominoes into the trash bin.

[BACK TO TOP](#)

Fraction Models

1. Select a Fraction Model builder and drag it to the workspace.
2. Select a color for the fraction model.
3. Create a fraction model by entering a numerator and denominator or using the up/down arrows.



4. Click the  button to build the fraction model.

5. Click and drag the fraction model to move it around the workspace.



6. To rotate a fraction model, use the  eTool to select it. Then click and



drag the  icon.

7. To remove a Fraction Model builder and fraction model from the workspace,



click the button on the Toolbar. You can also drag a Fraction Model builder or fraction model into the trash bin.

[BACK TO TOP](#)

Geoboard

1. Click and drag a Geoboard to the workspace.



2. Once a Geoboard is in the workspace, use the eTool to move it to another location.



3. To resize a Geoboard, use the eTool to select it. Then click the



icon to increase the size or the



icon to decrease the size.

4. Click and drag a rubber band to place it on the Geoboard. Click the

Delete Band

button and then click a band to remove it. To

Clear Board

remove all bands from the Geoboard, click the button.

5. To move the endpoint of a band, click and drag the endpoint to a new peg.

6. To create an additional endpoint on the band, click and drag a midpoint to a new peg.



7. To remove a Geoboard from the workspace, click the button on the Toolbar. You can also drag a Geoboard into the trash bin.

[BACK TO TOP](#)

Money

1. Click and drag a coin or bill to the workspace.



2. Once a coin or bill is in the workspace, use the  eTool to move it to another location. (Note: Since this eTool is based on real money, the bills and coins are a fixed size and proportional to each other. The bills and coins in this Money eTool are not scalable.)



3. To rotate a coin or bill, use the  eTool to select it. Then click and drag the [ROTATE] icon.



4. To turn over a coin or bill to see the reverse side, use the  eTool to



select it. Then click the  icon.



5. To randomly flip a coin, use the  eTool to select it. Then click the



 icon.



6. To remove a coin or bill from the workspace, click the  button on the Toolbar. You can also drag a coin or bill into the trash bin.

[BACK TO TOP](#)

Number Grid

1. Click and drag a Number Grid to the workspace.

2. To highlight a number on the grid, select a color from the bottom of the eTool and click the number. To remove the highlight, click the number a second time.

3. To highlight all odd or even numbers, click the appropriate button in the lower-left corner of the grid. Click the button a second time to remove the highlight.

4. To highlight a row or column, click the button to the left of the row or the top of the column. Click the button a second time to remove the highlight.

5. To use the skip count feature, enter the Start value, Count By value, and End value to be shown on the Number Grid. Then click the

 or  button depending on which section was completed. Two skip counts are available.

6. Click the  button to remove the highlights from all numbers.



7. To remove a Number Grid from the workspace, click the  button on the Toolbar. You can also drag the Number Grid into the trash bin.

[BACK TO TOP](#)

Pattern Blocks

1. Click and drag Pattern Blocks to the workspace.



2. Once a Pattern Block is in the workspace, use the  eTool to move it to another location. (Note: Since this eTool is based on the physical pattern blocks manipulative, the Pattern Blocks in this eTool are not scalable.)



3. To rotate a Pattern Block, use the  eTool to select it. Then click and



drag the  icon. Click the check box in the menu bar to rotate the Pattern Block in 5° increments. This allows you to easily tessellate the Pattern Blocks.



4. To remove a Pattern Block from the workspace, click the  button on the Toolbar. You can also drag a Pattern Block into the trash bin.

[BACK TO TOP](#)

Spinner

1. Click and drag the Spinner to the work area.



2. To resize a Spinner, use the  eTool to select it. Then click the



icon to increase the size or the



icon to decrease the size.

3. Select a number of sections (1 to 12) for the Spinner you want to create and

 button.

click the

4. To spin the Spinner once, select 1 as the Number of Spins and click the

 button.

To spin the Spinner multiple times, select the

 button.

number of spins from 2 to 100 and click the  button. The Spinner will spin once and the result is recorded in the Results table. Then the Spinner will continue spinning, and the table is updated until the selected total number of spins has been completed. A sequence of spins can be

 button during the sequence.

stopped by clicking the

5. Every time the spinner is spun, the Results table is first cleared of any previous data and then is repopulated with data of the current spin. To add to the current data in the table with data from subsequent spins, click the Keep Results check box.

6. To quickly generate data for multiple spins, select the number of spins, click

 button.

the Populate Table check box, and then click the  button. The Spinner will spin only once and the results of the selected total number of spins will be recorded in the table.

7. Change the default colors of the Spinner sections by clicking the Color Pie Pieces check box, selecting a color from the palette, and clicking on the piece you would like to change. Change labels of the Spinner sections by clicking on the label on the Spinner and typing a new letter. Any color or letter change you make to the Spinner is reflected in the Results table.

8. Click the  button to reset all previous Spinner results. Click the  button to hide the results from the Percent of Hits column. Both buttons are inactive when the spinner is spinning. Note: the total percent is always rounded to 100%.



9. To remove a Spinner from the work area, click the  button on the Toolbar. You can also drag the Spinner into the trash bin.

[BACK TO TOP](#)

Tangrams

1. Choose a color for your Tangram from the Colors list at the bottom.
2. Click and drag a Tangram piece to the workspace. You can also click and drag a Full Set of Tangrams to the workspace.



3. Once a Tangram piece is in the workspace, you can use the  eTool to move it to another location. (Note: Since this eTool is based on the physical Tangram manipulative, the pieces in this eTool are not scalable.)



4. To rotate a Tangram piece, use the  eTool to select it. Then click and



drag the  icon. Click the check box in the menu bar to rotate the piece in 45° increments. This allows you to easily tessellate the pieces.



5. To change the color of a Tangram piece in the workspace, use the  eTool to select it. Then click the appropriate color from the available color choices.

6. The parallelogram can be flipped horizontally. Use the  eTool to

select the parallelogram. Then click the  icon to flip the parallelogram horizontally.

7. To remove a Tangram piece from the workspace, click the  button on the Toolbar. You can also drag a Tangram piece into the trash bin.

[BACK TO TOP](#)

Thermometer

1. Click and drag a Thermometer to the workspace.

2. Once a Thermometer is in the workspace, use the  eTool to move it to another location.

3. Drag the red slider on the right side to adjust the temperature.

4. To hide either the degree scale or key references, click the



buttons.

5. To remove a Thermometer from the workspace, click the  button on the Toolbar. You can also drag the Thermometer into the trash bin.

[BACK TO TOP](#)
