

123 Easiteach

Maths



Getting Started Guide



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Introduction

Welcome to RM Easiteach Maths, a set of software tools to enhance the teaching of maths skills and processes through interactive whole-class teaching.

RM Easiteach has been developed specifically for use on interactive technologies, including all brands of interactive whiteboards. It can transform the classroom teaching and learning experience, and help you deliver fast-paced, interactive and highly differentiated lessons.

Installing RM Easiteach Maths

For information on how to install and license RM Easiteach Maths, please refer to the separate RM Easiteach installation guide supplied in the pack.

Expand and Enhance your Use of RM Easiteach

RM Easiteach Subject Tool packs are also available for Literacy, Science and Geography. These tools are easy to use, flexible software equivalents of familiar teaching tools that you already use in the classroom; for example, writing frames for Literacy, map building tools for Geography and stopwatch and timer tools for Science.

Lesson Content Packs are also available. Developed with teaching experts, they provide teachers with a wealth of prepared material, all referenced to learning outcomes and objectives. Each activity has comprehensive teaching notes, vocabulary, objectives and suggestions for further work. They are highly visual and easy to modify and update to suit your needs.

For more details please, please contact your RM Easiteach distributor or visit www.rm.com/easiteach or www.rmeducation.com

Reviewing your Licence Agreement

If you wish to review your Licence Agreement, which details how and where you are licensed to use RM Easiteach, do the following:

1. Click **Start > Programs > RM Easiteach > RM Easiteach.**
2. Click **File > About Easiteach.**
3. Click on the **Licence Agreement** button.

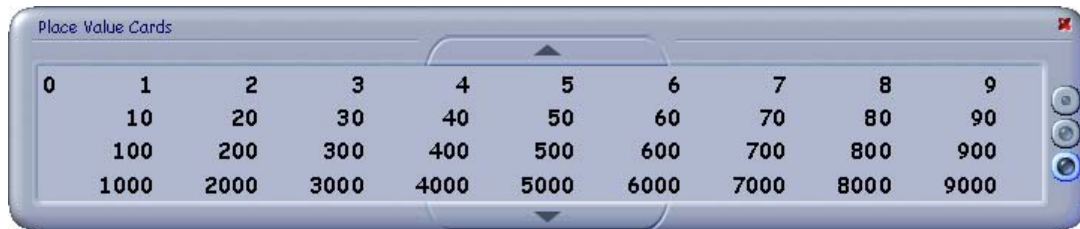
Key Features

The Maths tools are located on the Maths toolbar. Select **Toolbars > Maths** to display it.

Place Value Cards

Allows you to use place value cards of any number in one of three sizes. The cards combine to create numbers as you would do with real cards. RM Easiteach aligns the cards for you automatically.

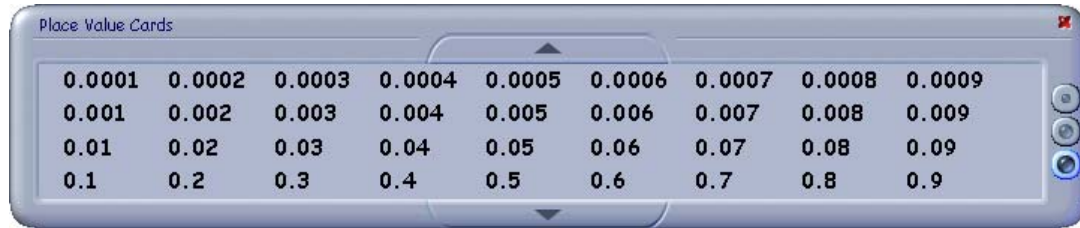
Click the **Place Value Cards** button to display the palette that you use to create place value cards:



Drag the number you want onto the Easibook page. The number appears as a 'card'.

You can drag any of the Easiteach palettes around the page, including the Place Value Cards palette. To close a palette, click the red cross in the top right corner of the palette.

If you want to display larger numbers, click the down arrow. The Place Value Cards palette can display numbers up to 9 999 999. To return to the smaller numbers, click the up arrow. To display numbers with decimal places, click the up arrow again:



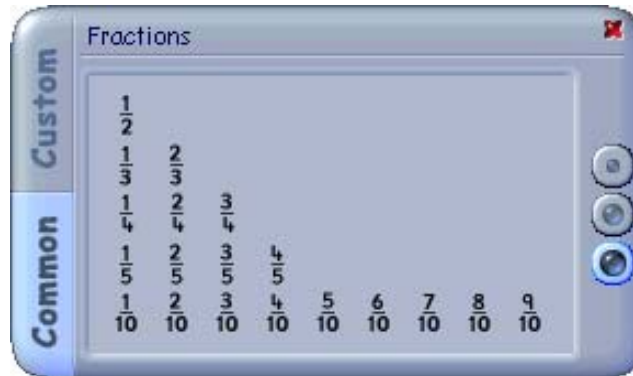
You can change the size of new place value cards using the sizing buttons at the right of the palette.



Fractions

Allows you to place fractions of any value on your page easily.

Click the **Fractions** button to display this palette:



By default the Common palette is displayed. This allows you to place common fractions on the Easibook page very quickly. Simply drag the fraction you want onto the Easibook page. You can change the size of the fractions using the buttons on the right. You can also drag the palette itself around the page.

If the fraction you want to use is not shown in the Common palette, you can create your own customized fraction. Click the **Custom** tab to display the Custom palette:



To create your own fraction, change the numbers in each of the three boxes as required. You can enter the fraction using either your computer keyboard or the on-screen keyboard. To delete a number, click next to it and press the **Backspace** key on either keyboard.

To put your fraction onto the Easibook page, drag the sample fraction (shown on the right of the palette) to where you want your fraction to appear on the page.

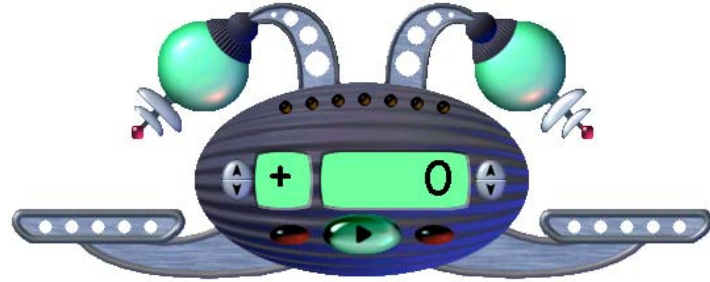


The Function Machine

The function machine will carry out simple operations on whole numbers, decimals and fractions.

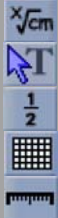
To display a function machine on the page, click the **Function Machine** button.

You can drag a number onto the function machine in a number of ways: using the **Number, Algebra and Symbols** palette, **Edit** mode, the **Fractions** palette, **Number Grids** and **Number Lines**.



Place a number on the left-hand side. Use the up and down arrows next to each window on the machine to select an operator in the left-hand window and another number in the right-hand window. The contents of the two windows - an operator and a number - form the function.

To activate the function machine, click the arrow button below. The machine will complete the function and display the answer on the right-hand side. Place a number on the right-hand side and the machine can complete the inverse function.



Number Grids

Allows creation of number grids in many sizes and shapes, with and without numbers.



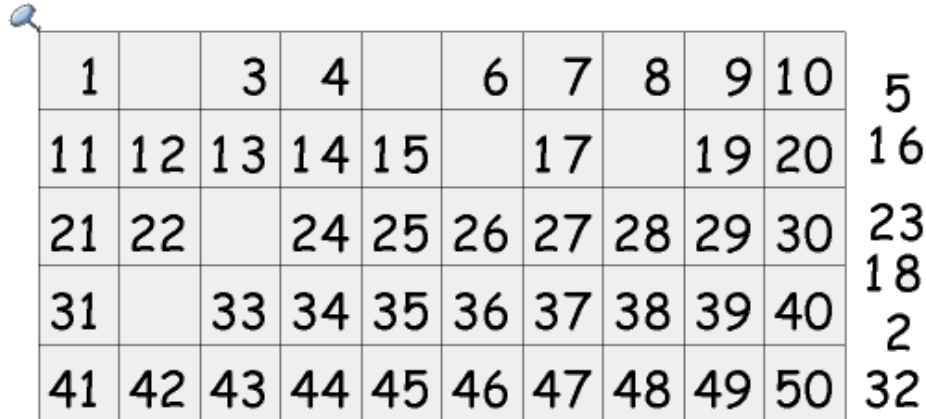
Click the **Number Grids** button to display this palette:



By default the Common palette is displayed. This allows you to place common number grids on the Easibook page very quickly. Simply drag the number grid you want onto the Easibook page. Use the up and down arrows to see all the available common number grids.

Once the number grid is on the page, you can move it into position by dragging the blue drawing pin.

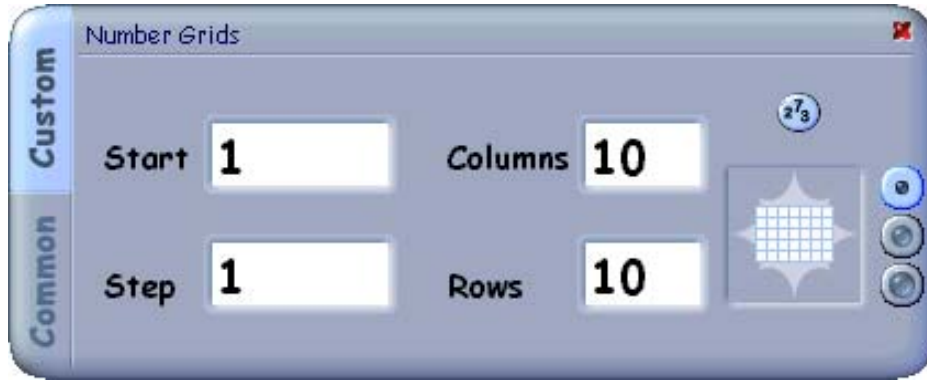
You can also drag individual numbers off the grid, as shown in this example:



1		3	4		6	7	8	9	10	5
11	12	13	14	15		17		19	20	16
21	22		24	25	26	27	28	29	30	23
31		33	34	35	36	37	38	39	40	18
41	42	43	44	45	46	47	48	49	50	2
										32

If you do not want to use any of the common number grids, you can create a customized number grid.

To do this, click the **Custom** tab. The palette changes to show the following options:



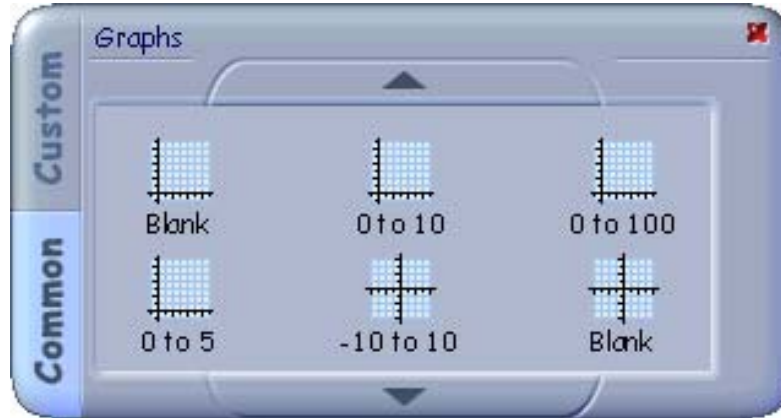
Choose the start number, the numbers of columns and rows and the step size. Then drag the sample grid (shown at the right of the palette) onto the page.

By default, numbers are shown in each cell of the grid. To create a blank grid, click the **Display Numbers** button to disable the number display.

Graphs

Allows graphs to be placed on the page in a wide variety of shapes and sizes.

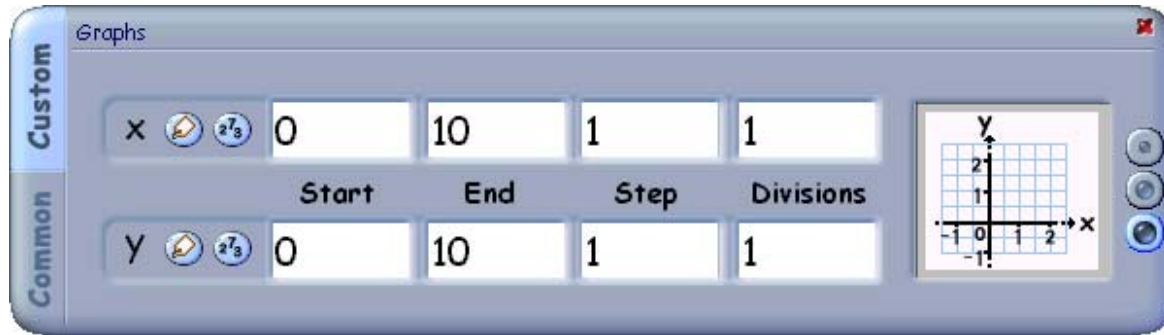
Click the **Graphs** button to display the Graphs palette:



By default the Common palette is displayed. This allows you to place common graphs on the Easibook page very quickly. Simply drag the graph you want onto the page.

Once the graph is on the page, you can move the whole graph into position by dragging the blue drawing pin. You can also drag individual numbers off the graph to another part of the page.

As well as using any of the common graphs, you can create a customized graph. When you click on the **Custom** tab, the palette changes to display these options:



You can choose the start and end values for each axis, the step size and the division size (i.e. the number of squares between each step on the axes). Then drag the sample graph (shown at the right of the palette) onto the page.

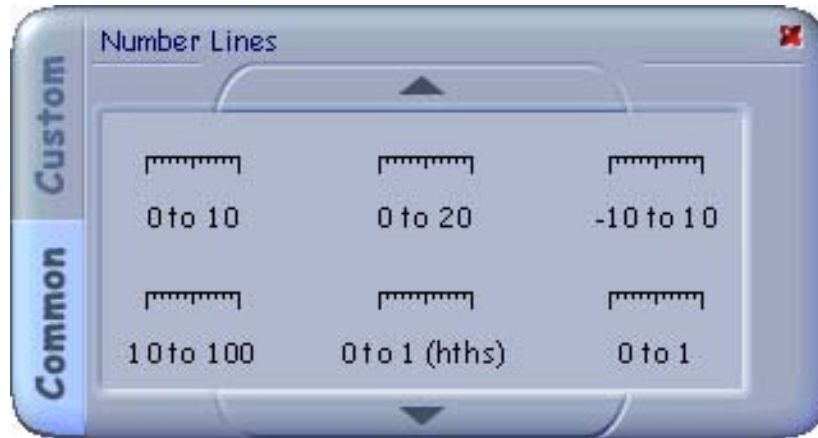
By default, the axes of the graph are labelled x and y, with numbering along both axes. To create a graph without x and y labels, click the **Display Labels** button to disable labelling.

To create a graph without numbered axes, click the **Display Numbers** button to disable numbering.

Number Lines

Allows common and custom number lines to be placed on your page.

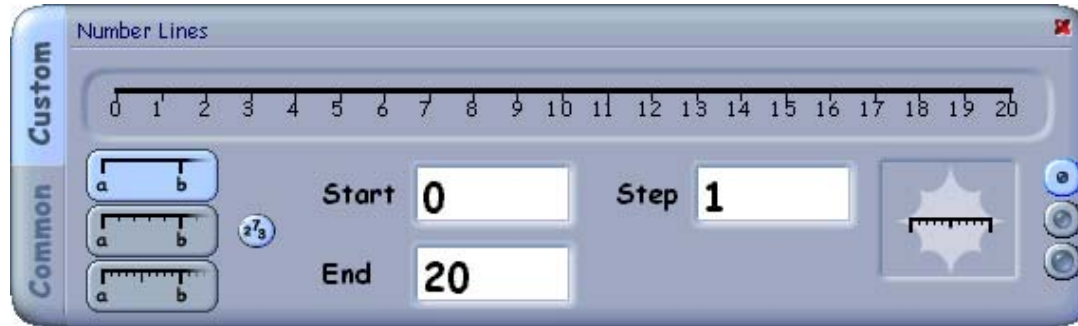
Click the **Number Lines** button to display this palette:



By default the Common palette is displayed. This allows you to place common number lines on the Easibook page very quickly. Just drag the number line you want onto the page.

Once the number line is on the page, you can move the whole number line into position by dragging the blue drawing pin. You can also drag individual numbers from a number line to another part of the page.

As well as using any of the common number lines, you can also create a customized number line:



Using the **Custom** tab, you can change the start and end values and the step size.

You can change the style of your number line to show different calibrations, by selecting **Type 1**, **Type 2** or **Type 3**.

To create a number line without numbers, click the **Display Numbers** button to disable numbering.

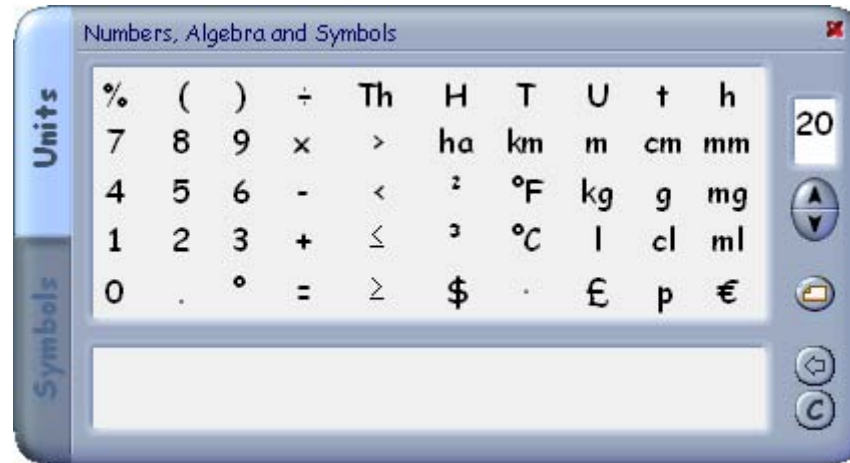
Drag the sample number line (shown at the right of the palette) onto your page to place your custom number line.



Numbers, Algebra and Symbols

Allows numbers, algebra elements and other common symbols to be placed easily on your page.

Click the **Numbers, Algebra and Symbols** button to display this palette:



Use the **Units** palette to place numbers and commonly used mathematical symbols on the Easibook page. Simply click on the numbers and symbols you need. For example, to create the number 356, click **3**, then **5** and then **6**. You could then click on the **mm** symbol to make this into 356 mm.

The **Card Background** button places the characters on a card background - useful for moving and sorting activities. Click the button once to put the characters onto a card. To go back to plain writing, click it again.

If you make a mistake, you can either:

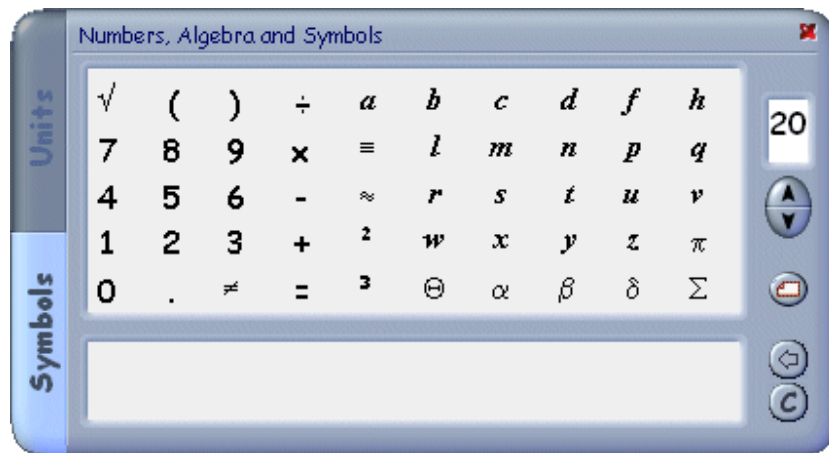
- click the **Backspace** button to delete the last character you wrote
- click the **Clear** button to clear the display

The current font size is displayed in a window on the right-hand side of the palette. To make it larger, click the **Increase Font Size** arrow. To make it smaller, click the **Decrease Font Size** arrow button.

When you have created the characters you require, drag the previewed characters onto the page.



You can also select algebraic symbols and numbers to create algebraic expressions, using the **Symbols** tab:



It works in exactly the same way as the **Units** tab. You can move between these tabs while you create a single expression.

Compass Tool

Allows you to draw circles by choosing the centre point on your page and dragging the pointer out to the desired radius.



Click the **Compass** button.

Click once on the page where you want the centre of the circle to be. Then move the pointer and click again to set the radius.

This feature allows you to position circles accurately. For example, it is easy to draw a circle whose centre lies on the circumference of another circle.

Opening Existing Easibooks

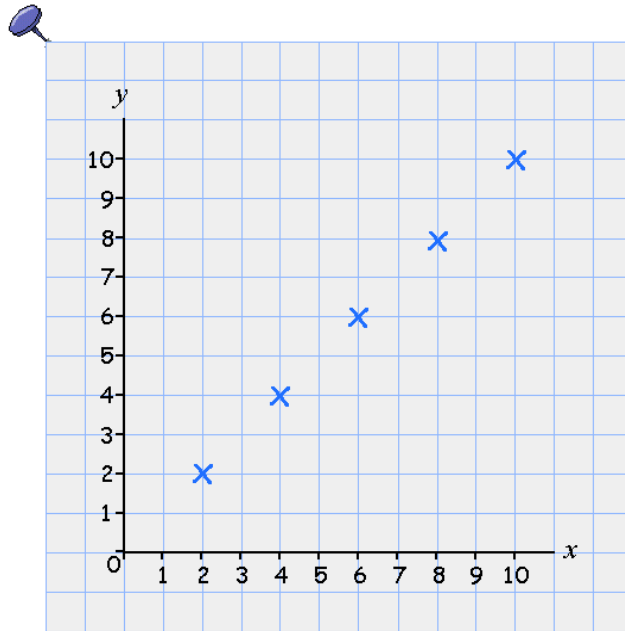
RM Easiteach Maths can open Easibook files created in other RM Easiteach products: RM Easiteach Starter, RM Easiteach Science, RM Easiteach Geography or RM Easiteach Literacy. However, you may not have access to modify all the features in an existing Easibook, since some are controlled by licensing. For example, RM Easiteach Literacy tools are only available to licensed RM Easiteach Literacy users.

To open an Easibook, go to **File > Open > Browse...** and navigate to the Easibook you want to open. Then click **OK** to open the Easibook.

Tips for using RM Easiteach Maths

Here are some tips to help you work with RM Easiteach Maths. Look out for further tips on using RM Easiteach at www.rm.com/easiteach or www.rmeducation.com

Marking Points on a Graph



When you are asking students to mark the points on a graph, use either the decimal point or the multiplication symbol from the **Numbers, Algebra and Symbols** palette.

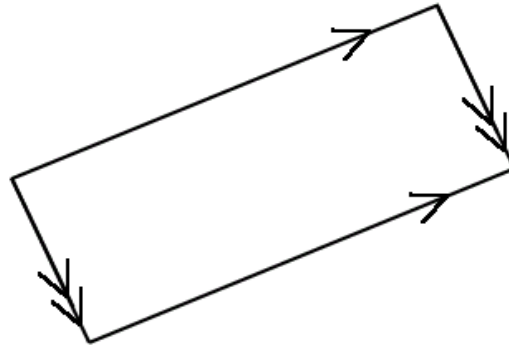
To do this, create a graph using the **Graph** tool. Now open the **Numbers, Algebra and Symbols** palette. Select the multiplication symbol and drag it into place on the graph. Leave the **Numbers, Algebra and Symbols** palette open, select the multiplication symbol again and drag it onto the next point.

You could also join up these points by drawing a line with the **Line** tool.

Drawing a Parallelogram

Click on the **Line** tool from the Easiteach toolbar and select **Parallel Line** from the pop-out menu. Use it to draw the first side of the parallelogram.

Select **Edit Mode**. Click on the line to select it, and click **Copy** on the Easiteach toolbar (you may have to expand the toolbar first). Click **Paste** to create a new line parallel to your original, and drag it to the position you want.



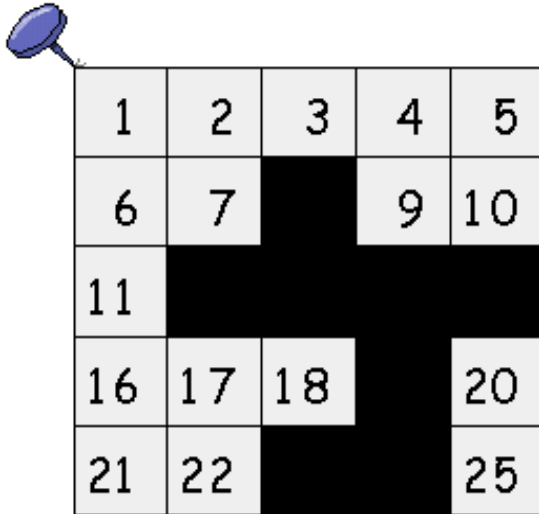
Use the **Parallel Line** tool to draw a third side joining the other two. In **Edit Mode** select this line, and make a copy using **Copy** and **Paste**. Position the copy exactly over the original line; drag in one end to shorten it, so that the arrow labelling the side appears double. Select both lines and **Group** them.

Copy and **Paste** these grouped lines; move the copy into position to make the last side. Finally, select all four sides and **Group** them.

You can now move the complete parallelogram around the page as a single object.



Painting Grid Squares



1	2	3	4	5
6	7		9	10
11				
16	17	18		20
21	22			25

By painting squares in a number grid black, you can hide the numbers. Set **Fill Colour** to black, then select the **Fill** tool. To paint a square, click inside it.

You could then, for example, ask the students which numbers should go in the blackened squares.

To reveal the numbers, click on the squares again with the **Fill** tool and black selected. (You could also reveal the numbers by painting the squares white.)

By painting squares on a number grid with different colours, you can highlight different patterns in the numbers.

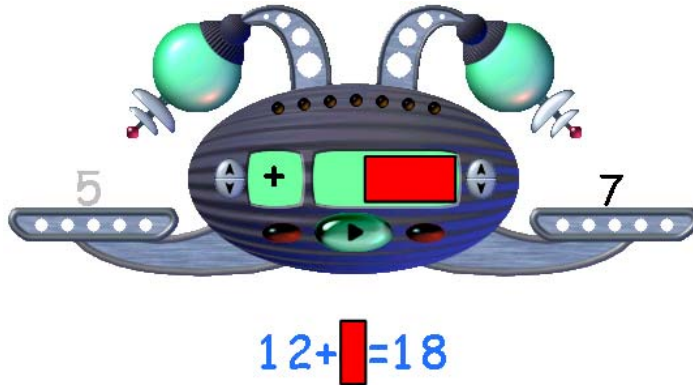
Undo and Redo

You can use the **Undo** and **Redo** buttons to step backwards and forwards through a lesson to reiterate important points.

For example, during a lesson you might highlight a sequence of numbers on a number grid. Later in the lesson, you can reinforce the concept by replaying the steps.

Coloured Rectangles

You can use coloured rectangles to hide certain areas on the page. To reveal the answer gradually, resize the rectangle. To reveal the answer instantly, select the **Bin** tool on the Easiteach toolbar and click on the rectangle.

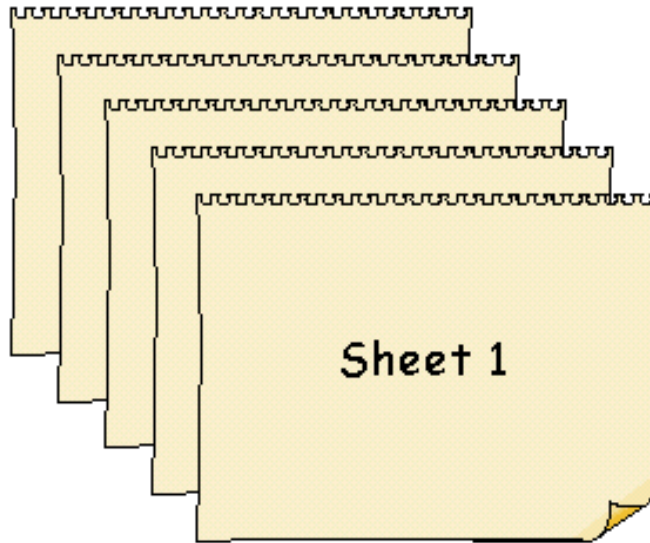


When drawing rectangles, choose the colour of the rectangle using the **Fill Colour** and **Line Colour and Width** tools; then choose the **Rectangle** tool. Click once on your page to start drawing a rectangle; to fix its size, click again.

Printing at Different Stages

You can create differentiated worksheets by printing certain pages at different stages. Use a printout of an early point in the lesson as a worksheet for more able students. In some cases, you might use a printout of a partially completed page to help less able students.

Stacking Paper



To demonstrate several different examples, create each example on a separate piece of paper from the **Multimedia Resources** library and then stack the pieces of paper onto a single Easibook page.

The diagram shows five pieces of paper stacked on the page. When you are finished with the first sheet, you can drag it into the dustbin (or use the **Bin** tool on the Easiteach toolbar), revealing the second sheet. Make sure that the sheets are stacked in the correct order for the lesson.

Dragging Objects

If you are using a finger-driven whiteboard, you might find it easier to drag objects using the back of a fingernail rather than the tip of a finger.



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