

## Number Grid

This ITP generates a 100 square. Choose a colour or the grey mask. You can then click on individual cells to hide or highlight them in different colours, and by clicking on the box at the left-hand foot of the grid and using the pointers you can hide or highlight rows and columns. The prime numbers and multiples can also be highlighted.

You can change the number of columns from 3 up to 13, the starting number, and its position – either top left corner or bottom left corner of the grid. Choose the mask option to create a template that can be moved around the grid to hide or highlight particular groups of cells. The template can be rotated using the single arrow button.

The ITP can be used to explore different multiples, number sequences and patterns on grids of different sizes. The superimposed masked template can provide practice at adding groups of numbers and enable children to hypothesise about the sums and difference of the numbers.

The ITP can develop children's ability to predict and generalise. Changing the number of columns provides a new grid to test general statements about the relationships between numbers and to look for counter examples.

Annotations for the Number Grid:

- mask or highlight a row
- click on a square to colour or uncolour it
- common multiples are shown in both colours
- use the mask to highlight or cover groups of numbers
- mask or highlight a column



Start number position – toggle between top left and bottom left corner.



Highlight all the prime numbers.



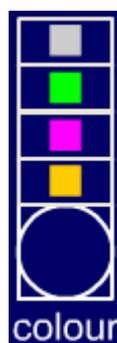
Use the pointers to set the number.  
Click on the number to highlight its multiples in the grid.



Use the pointers to set the start number.



Use the pointers to change the number of columns in the grid.  
You can select from 3 to 13 columns.



Set the highlight colour.

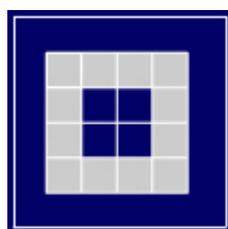


Open or close the masked template controls



Click on the mask button to make the masked template appear on the grid.

Use the pointers to move the masked template around the grid.



Click on individual squares to create the masked template.  
Click on the outer area to invert the mask, so that only the masked squares are uncovered.



Rotate the masked template by 90° each time. With the start number in the top left hand corner the template rotates clockwise.