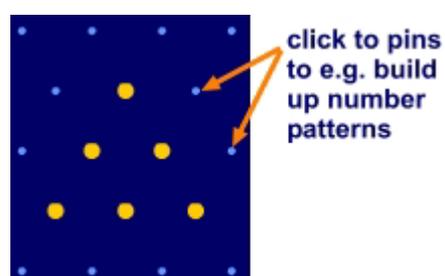
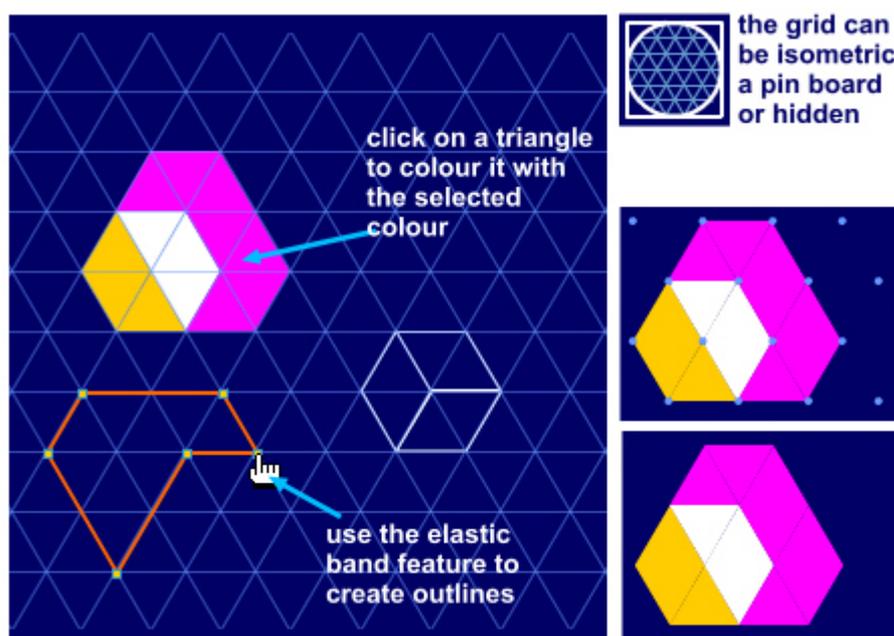


Isometric grid

This ITP allows you colour the equilateral triangles set out on an isometric grid. The grid can be hidden or become an isometric pin board. An 'elastic band' can be stretched around the pins to create outlines. One of three different rhombuses can be selected and dragged to different positions on the grid. These three rhombuses can be locked together to form the isometric view of a cube. Skeleton outlines of rows and columns of cubes can be formed this way and by colouring in two adjacent triangles, coloured faces can be created.

The ITP can be used to explore properties of shapes and space. The making of different shapes and patterns can support the teaching of number and problem solving, for example, to explore the interior and exterior angle and symmetry of polygons made up of equilateral triangles and to identify the patterns in triangle numbers.

The flexibility offered by the ITP allows it to be used to support a variety of teaching and learning contexts in mathematics. It can be used in conjunction with the Area ITP to look at the nets of 3-D shapes represented on the isometric grid.



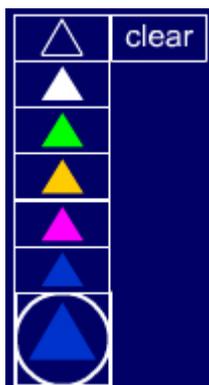
Click on the select rhombus to open the rhombus controls.

Each button places a rhombus in a different orientation on the grid. They can be dragged to any position on the grid.

The 'clear' button removes all rhombus outlines.

Drag unwanted rhombus outlines to the bin.





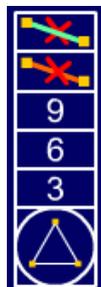
Click on the select colour button to open the colour controls.

The 'clear' button removes any white outlines (created when the top button is selected).

Select the blue triangle to erase any coloured triangles.



Lock the grid so that no changes are made when you wish to point to elements.



Click on the elastic band controls to open the elastic band options. You can select one or two an elastic bands with 3, 6 or 9 points.

The top two buttons erase the elastic band of the corresponding colour.