If you don't have colour tiles you can use these cutouts





## Nine Tile Puzzle

Years 4+

## Purpose:

Students will use geometric reasoning to solve a measurement (perimeter) puzzle.

The area of the 3 x 3 array is nine tiles.

The perimeter is 12 units.

- Remove one tile while maintaining the same perimeter.
- Remove another tile, while maintaining the same perimeter.
- Remove a third and fourth tile, while maintaining the same perimeter.
- Try removing a fifth and sixth tile while maintaining a perimeter of 12 units.

## Colour Tile Conundrum I

- There are six tiles in a row.
- The first and last tiles are blue.
- The third tile is red.
- The second last tile is green.
- There is a yellow tile between the red and green tile.
- There is a blue tile to the right of the red tile.

## Colour Tile Conundrum II

- There are four pairs of tiles of each colour.
- There are two red tiles at the start of the row.
- There are two green tiles at the end of the row.
- There is a yellow tile to the right of the pair of green tiles.
- There is a yellow tile to the left of the pair of red tiles.
- Two blue tiles are in the middle of the row of tiles.







