

MEASURES - AREA

LEVEL D.4

RECOGNISE THAT THE LENGTH OF THE PERIMETER OF A RECTANGULAR SHAPE DOES NOT DETERMINE THE AREA OF THE SHAPE

Fixed Perimeters¹²⁰

Give pairs or groups of pupils a piece of non-stretching string that is 24cm long and 1cm grid paper. Alternatively, they can work with the paper alone. Pupils investigate the various rectangles that can be made with a perimeter of 24cm. Each different rectangle can be recorded on grid paper and pupils record the area of the rectangle also.

Fixed Areas

This activity follows on from the previous activity and challenges pupils to see how many rectangles can be made with an area of 36cm^2 . Pupils can use square paper to record their rectangles. For each rectangle, pupils should determine and record the perimeter inside the figure.

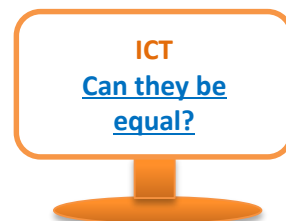
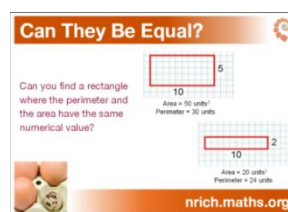


Are all the rectangles we have recorded equal? In what way are they similar? In what way are they different?

CONSOLIDATION ACTIVITIES

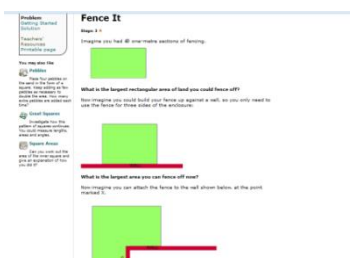
Can they be Equal?¹²¹

This poster based on a problem from the Nrich website challenges pupils to find a rectangle whose area and perimeter is of the same numerical value.



Fence it¹²²

This problem is also from the Nrich website. Pupils must consider the greatest area of rectangular land that can be enclosed using 40 metres of fencing. This problem has varying levels of difficulty and can be differentiated to enable multiple access points for pupils.



¹²⁰ Van De Walle 2007 p.388

¹²¹ <http://nrich.maths.org/7996>

¹²² <https://nrich.maths.org/2663>