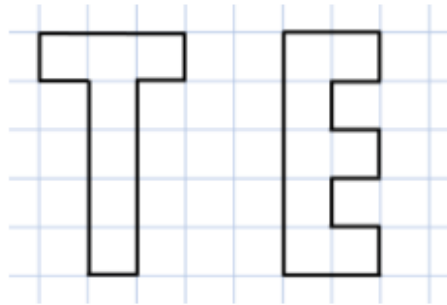


### Challenge time!

Have a go at the challenges below. Remember! The perimeter of a shape is the measurement of the outline of the shape so you need to add the sides together. A rectilinear shape is a shape where all the sides meet at right angles.

Which of these shapes has the longest perimeter?



Explore other letters which could be drawn as rectilinear shapes.

Put them in order of shortest to longest perimeter.

Can you make a word?

E has a greater perimeter, it is 18 compared to 16 for T.

Open ended.

Letters which could be drawn include:

B C D F I J L O P

Letters with diagonal lines would be omitted. If heights of letters are kept the same, I or L could be the shortest.

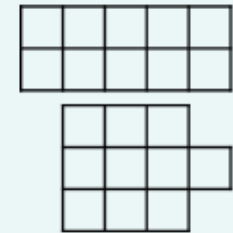
You have 10 paving stones to design a patio. The stones are one metre square.

The stones must be joined to each other so that at least one edge is joined corner to corner.



Use squared paper to show which design would give the longest perimeter and which would give the shortest.

The shortest perimeter would be 14 m in a  $2 \times 5$  arrangement or  $3 \times 3$  square with one added on.



The longest would be 22 m.

