



## Using patterns to solve problems

In the following questions, click on the boxes and type in your answers.

1. John used match sticks to make the patterns shown below.  
Complete the table below, to show the number of match sticks John used to make each pattern.

1st pattern



2nd pattern



3rd pattern



4th pattern



Patterns	1st pattern	2nd pattern	3rd pattern	4th pattern
Number of match sticks used	2			

- (a) How many match sticks John will need to make the 5<sup>th</sup> pattern?  
(b) How many match sticks John will need to make the 8<sup>th</sup> pattern?

2. Anna used triangles to make the patterns shown below.

1st pattern



2nd pattern



3rd pattern



4th pattern



Complete the table below, to show the number of triangles Anna used to make each pattern.

(a)

Patterns	1st pattern	2nd pattern	3rd pattern	4th pattern
Number of triangles	6			

- (b) How many triangles will Anna need to make the 5<sup>th</sup> pattern?

- (c) How many triangles will Anna need to make the 7<sup>th</sup> pattern?