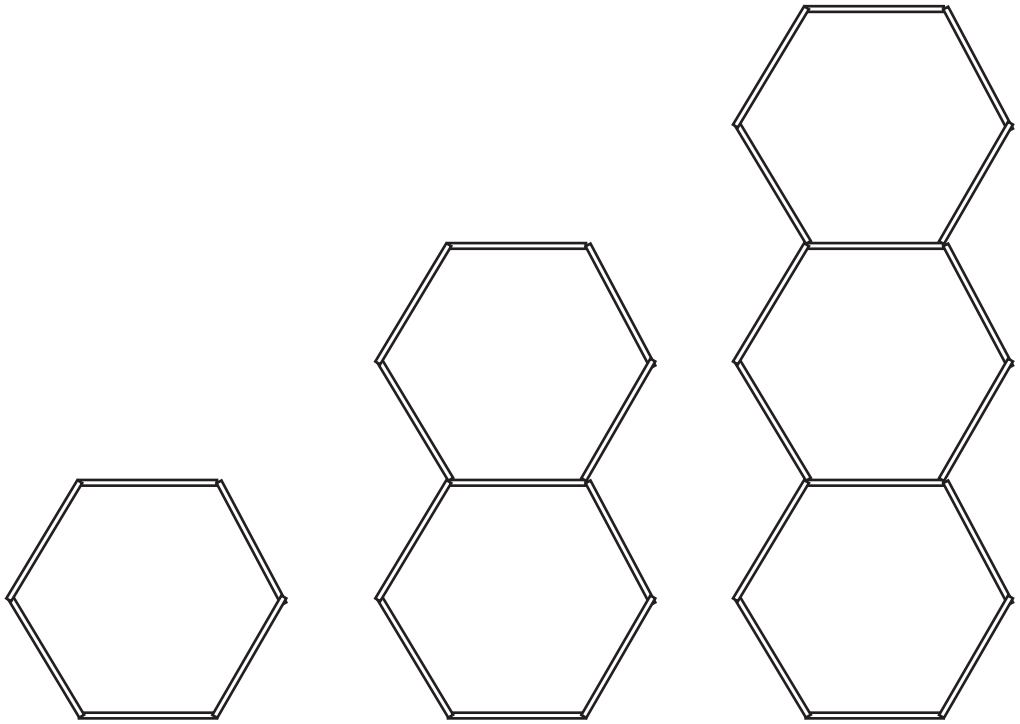
Hexagons

Use matchsticks to make these patterns:



1 2 3

Make the next 2 patterns in the sequence.

Complete this table. Predict and test the number of sticks for 8 and 10 hexagons, then predict the number of sticks for 12 and 20 hexagons.

Number of hexagons	**1**	**2**	**3**	**4**	**5**	**8**	**10**	**12**	**20**
Number of sticks									

Challenge (Year 6)

Can you write an algebraic expression for the number of sticks for n hexagons?

Answers

Number of hexagons	**1**	**2**	**3**	**4**	**5**	**8**	**10**	**12**	**20**
Number of sticks	6	11	16	21	26	41	51	61	101

Challenge (Year 6)

Number of sticks = 5n +1