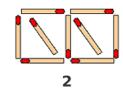
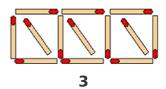
## **Matchstick patterns II**

This task is about completing and describing rules for growing patterns.





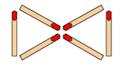


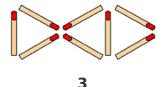
a)i)Here are the first three shapes in a pattern. Finish the table to show the number of matches you would need to make the next four shapes in the pattern.

Shape number	1	2	3	4	5	6	7
Number of matches		9	13				

ii) Use words or an equation to explain how you worked the pattern out.







b)i) Finish the table to show the number of matches you would need to make the next four shapes in this pattern.

Shape number	1	2	3	4	5	6	7
Number of matches	3	6	8				

	ii)	Use words	or an	equation	to	explain	how	you	worked	the	pattern	out
--	-----	-----------	-------	----------	----	---------	-----	-----	--------	-----	---------	-----

Published on Assessment Resource Banks (https://arbs.nzcer.org.nz)