

Name _____

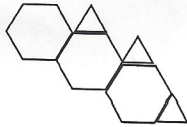
Period _____



Hexagon Dragons

Dragon designs can be generated from pattern blocks. The dragons illustrated below illustrate a growing pattern. You will use these patterns to predict what other dragons in the pattern-block design will look like.

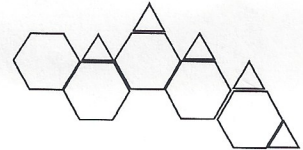
Dragon #1



Dragon #2



Dragon #3



1) Using the same pattern block design, draw the next two dragons in this pattern.

Dragon #4:

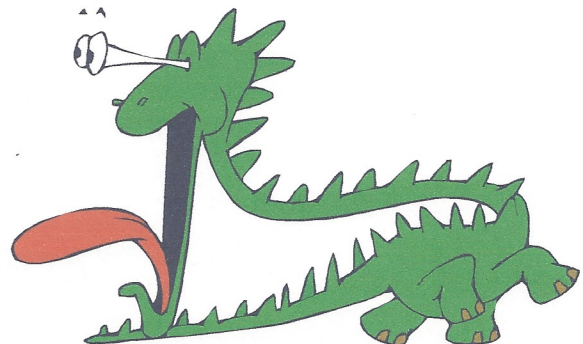
Dragon #5:

2) Predict (describe) what the eighth dragon will look like and tell how many blocks you would need to build it.

3) Explain any pattern you used to find the answer to the number of blocks in the eighth pattern.

4) Complete the table of values:

Dragon #	Number of blocks added	TOTAL number of blocks
1	6	$3 + 3 = 6$
2		
3		



4) Challenge: If you wanted to tell how many blocks you would need to build the 25th dragon without actually building it, can you write a rule in words, or a math expression, that you can use to figure it out? Then, explain how your rule works.