INVESTIGATIONS

MILES OF TILES

1. Draw the next two patterns

2. Can you tell the how many black and white tiles will the fifth pattern have?

3. What about the 10th pattern. How many black and white tiles does it have?

4. Can you make a general rule for any pattern to find the number of black and white tiles in it?

Pattern Number	Number of Tiles Across	Number of Black Tiles	Number of White Tiles	Total Number of Tiles
1	3	4	1	5
2	5	9	4	13
3				
4				
5				
-				
-				
10				
-				
-				
n				

MARKING SCHEME

1. 3RD pattern   20 marks

2. 4th pattern   30 marks

3. Predicting the 5th pattern correctly   10 marks

4. Predicting the 10th pattern correctly   20 marks

5. Predicting the nth pattern   20 marks

                           Total marks   100