

Patterning Test

Name: _____

1. For each pattern:
- Describe the pattern.
 - Write the next 3 terms.
 - Find the 10th term.
- 5, 8, 11, 14, ...
 - 14, 25, 36, 47, ...
 - 1, 8, 27, 64, ...
 - 1, 3, 7, 15, 31, ...

2. a) Describe the *stepwise pattern.*

Input	Output
1	8
2	11
3	14
4	17
5	20
6	23

- b) How can you find an output number when you know an input number?
- (general pattern)*

- c) Write the next 3 rows in the table.

3. Here is a pattern of tiles.



Term 1



Term 2



Term 3

- a) Make a table to show the numbers of *light* and *dark* tiles in each term.

This pattern continues.

- How many *light* tiles will there be in the 20th term?
- How many *dark* tiles will there be in the 100th term?
- What will be the total number of tiles in the 30th term?
- How many *light* tiles will be in the term that has 48 *dark* tiles?
How do you know?