$\qquad$
$\qquad$

Algebra
Unit 1 Line Master 6a

Representing and Extending Patterns

1. Draw terms 0 to 3 of your pattern and complete the table.

| Term <br> number | Term <br> value |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

2. a) Write an algebraic expression to represent your pattern.
b) Assume that your pattern continues.

What is the term value when the term number is $10 ?$
When the term number is 100 ?
How do you know?
$\qquad$
$\qquad$

Algebra
Unit 1 Line Master 6b

Representing and Extending Patterns (cont'd)
3. a) Use your algebraic expression to determine the value of a term between term 11 and term 99.
b) Write your answer to part a) in the blank space in Question 3 on Master 7. Write your name and your partner's name at the top of Master 7 as the people who created the pattern. Remove the tiles for terms 0 , 1 , and 5 from your pattern. Leave terms 2, 3, and 4 of your pattern and your copy of Master 7 for another group to explore.

