



## Painting Towers

Name \_\_\_\_\_

A tower is being painted on all four sides and the roof. The painter needs to know how many square faces need to be painted in order to purchase the paint. She builds a model to help her decide the number of square surfaces in a tower that is 100 stories high. Use linking or centimeter cubes to build a model.

# of stories in building	# of faces to be painted
1	5
2	9
3	
4	
5	
6	
100	

1. How does the number of stories relate to the number of faces to be painted?

2. Write an algebraic expression for finding the number of faces to be painted if  $n$  represents the number of stories high the tower is.

4. Plot the ordered pairs from the table. What pattern do you see in the scatter plot?

