## Growing Patterns Analysis

Task 1: Fill in the following table:

| Figure \# | 1 | 2 | 3 | 4 | 5 | 6 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# of blocks |  |  |  |  |  |  |  |

Task 2: Graph the points shown in the table above.


## Task 3: Analysis Questions

1) How is the pattern (the blocks/pictures) growing?
2) What do you notice about the table? How are the numbers changing?
3) What do you notice about the graph?
4) There will be $\qquad$ total pattern blocks will you need in the $10^{\text {th }}$ figure because $\qquad$ _.
5) How many total pattern blocks will you need in the $20^{\text {th }}$ figure? Why?
6) There will be $\qquad$ total pattern blocks will you need in the $100^{\text {th }}$ figure because $\qquad$ .
7) How many total pattern blocks will you need in the $n^{\text {th }}$ figure? Why?
8) Figure number $\qquad$ has 60 blocks. I know this because
9) What figure number has 81 blocks? Explain your reasoning.
