## Circle Patterns

## Task 1:



Study the pattern and then draw figures 4 and 5. Use the information to complete the table at the bottom.

Pattern A

1. 0000
2. 


3.

4.
5.

| Figure Number | Number of Circles |
| :--- | :--- |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 10 |  |
| $n$ |  |

## Task 2:

Study the pattern and then draw figures 5 and 6 . Use the information to complete the table at the bottom.

## Pattern B

1. 
2. 
3. D
4. 
5. 
6. 

| Figure Number | Number of Circles |
| :--- | :--- |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 10 |  |
| $n$ |  |

Task 3: Analysis Questions

1. How is Pattern A growing (what is being added each time)?
2. How is Pattern B growing (what is being added each time)?
3. Pattern $\qquad$ is growing faster because $\qquad$ .
4. How will you see the difference in how fast each pattern is growing on the graph (what will be different about the lines when graphed)?

Task 4:
Using the graph below, graph the coordinates from each of your tables (as many as fit). Use one color for the graph of pattern A and another color for the graph of Pattern B.


Figure Number

