LESSON: Linear & Non-Linear Functions
Function Unit

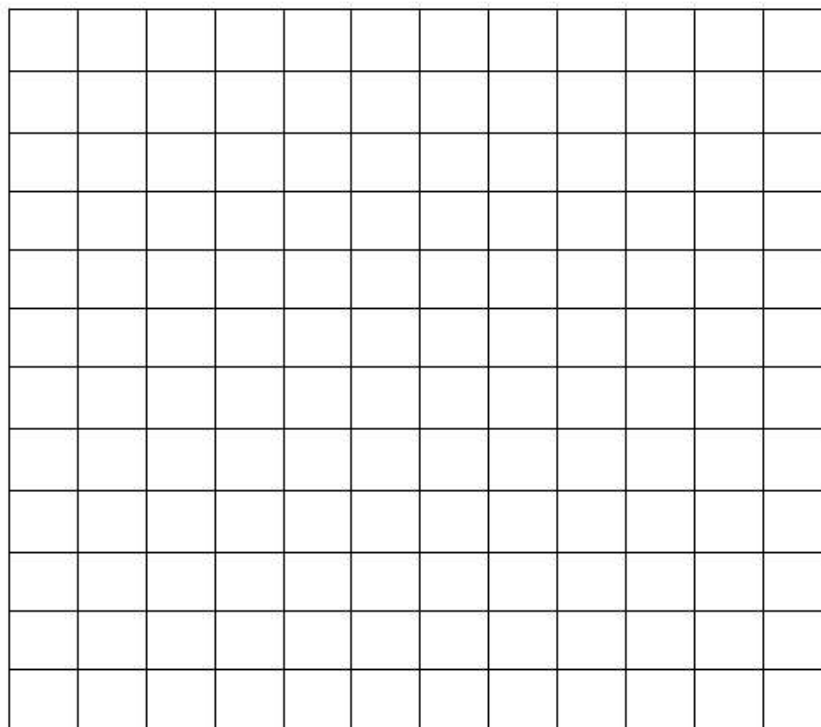**Name:** _____ **Hour:** _____

CHALLENGE QUESTIONS:

1. Given a square with length x, fill in the table with the perimeter.

Length of side, x (in cm)	0	1	2	3	4	5	6
Perimeter of square, y (in cm)							

2. Now graph the information from the table on the graph below. Be sure to label the axes.

3. What do you notice about the points? Would you consider this a function, why or why not?

4. **From the graph**, can you predict the perimeter for a square with side length 8 cm? Why or why not?
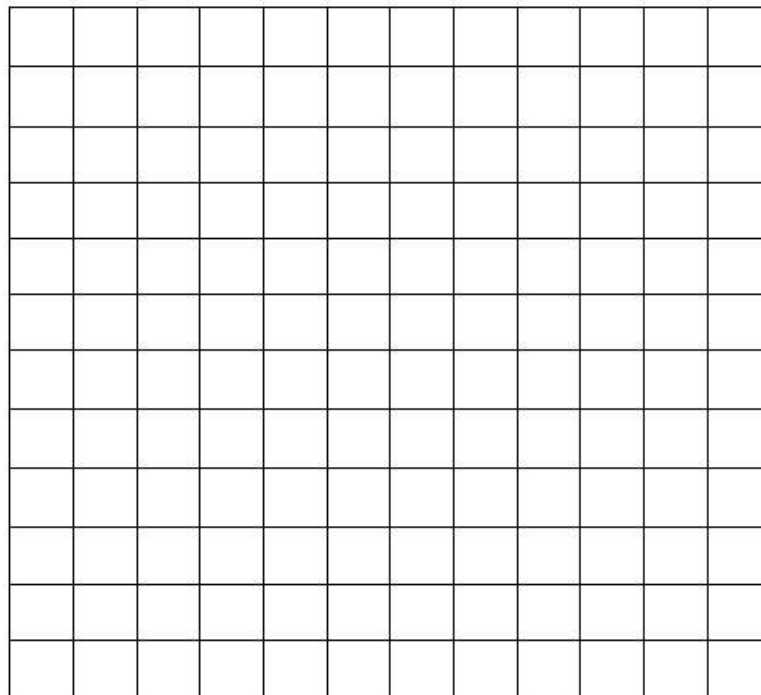
5. Given a square with length x, fill in the table with the area.

Length of side, x	1	2	3	4	5	6
Area of square, y						

6. Now graph the information from the table on the graph below. Be sure to label the axes.

7. What do you notice about the points? Would you consider this a function, why or why not?

8. **From the graph**, can you predict the perimeter for a square with side length 8 cm? Why or why not?