**SPEEDY SQUARES**

|  |  |  |
| --- | --- | --- |
| Group Members | | |
| Builder | Timer | Recorder/Cube Manager |

**How long would it take you to build a 26 by 26 square out of linking cubes?**

|  |  |
| --- | --- |
| Side Length | Time (s) |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

What is the independent variable?

What is the dependent variable?

Create a scatter plot of your data.   
Be sure to label your axes.

Does this data look linear or quadratic?

Use a graphing calculator or DESMOS to determine a model for your data. Write your equation below:

Use your equation to find the time needed to build a 26 x 26 square. Make your thinking visible.