

## Building Staircases

Imagine you are building staircases out of cubes. To make 1 step, you need only 1 cube, as you can see. To make 2 steps, you need 3 cubes. This project will utilize the Google Slides apps of the google software.



- Sketch the first 5 staircases. Then build a table to show the relationship between the number of steps in a staircase and the number of cubes needed to build the staircase.
- Describe in words and symbols the process that you used to relate the number of steps in the staircase to the number of cubes. Add a column to your table to show the process to find the number of cubes for each staircase.
- Write a function rule for the relationship between the number of steps in a staircase and the number of cubes in the staircase. Identify the variables you used. Make a graph of the problem situation.
- Make a graph of the function rule and superimpose it on the problem situation graph.
- Add animations to each slide and transitions between slides.
- Communicate your thought process in the voice over recording part of the project.

The first 5 staircases are properly made. Pictures and/or representations of each staircase are included in the presentation.	<b>0 1 2 3 4</b>
Table is correctly made, displaying proper labels, titles, and data.	<b>0 1 2 3</b>
The process used to relate the number of steps to the number of cubes is described using proper words and symbols. A column was added to show the process.	<b>0 1 2 3 4</b>
Function rule is correctly written, variables are identified.	<b>0 1 2 3</b>
Graph of problem situation is included in the presentation. Domain and range are accurately addressed.	<b>0 1 2 3 4</b>
Graph of the function rule is superimposed on the problem situation graph. Domain and range of the function rule are accurately addressed.	<b>0 1 2</b>
Transitions between slides, timing of slides, animations	<b>0 1 2 3 4</b>
<b>WOW factor</b>	<b>0 1 2</b>

**Score: \_\_\_\_\_ out of 26**