

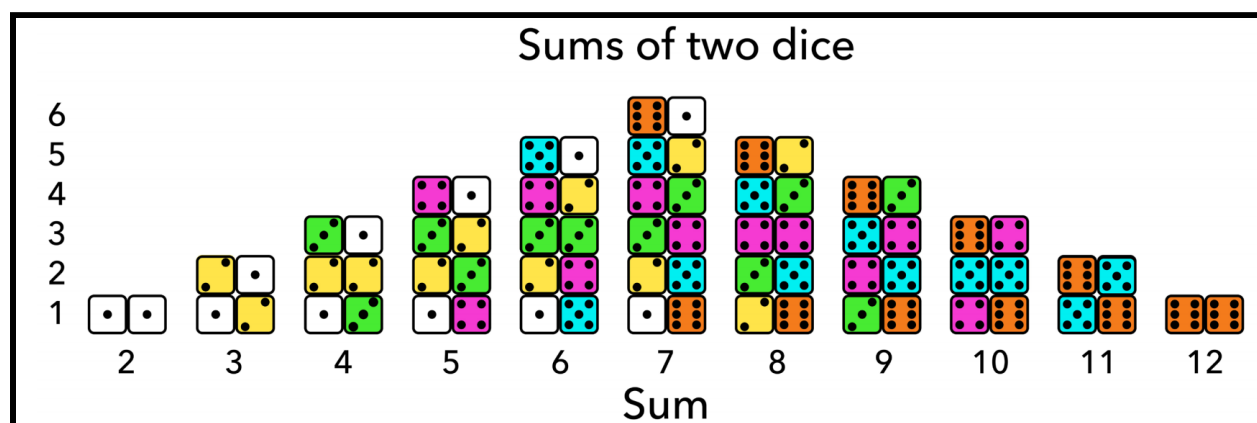
Data Visualization Project #1

Objective: Collect, interpret, organize, and graph data.

New Tool: Google Sheets

Data Visualization: Bar Graph

Day 1: Introduction and Launch



Students analyzed the Sums of Two Dice graph. During a class discussion, students answered questions such as “What do you notice?” “What do you wonder?” “Why was this graph made?” “What is this graph trying to show us?”

For their project, students were to create their own version of the Sums of Two Dice graph. To create their data, students used a six-sided dice and their choice of a 12-sided or 20-sided dice. Students started the project by using a paper-and-pencil data sheet to record their initial dice rolls and sums.

Day 2: Sheets! Data input and organization

Students learned why people use Google Sheets for data then learned all about how to use the tool. Students began by inputting their data collected on Day 1. Students continued for much of Day 2 with collecting and inputting more data through dice rolls. As one student put it, “I rolled the dice so many times my hand was sore!!”

At the end of Day 2, students started to explore the sorting tools on Google Sheets to figure out how their data could best be organized so that it is easy to interpret.

Day 3: Data synthesis

Students had a new tab on their Sheets that included a merge of all data that students with the same dice collected. This merged data encompassed all possible combinations of dice rolls.

As a class, Math1 looked at the Sums of Two Dice graph again to discuss which of the data that they had been collecting is most important for the graphs that they will create. Students came to the conclusion that the sums of their dice rolls and the number of possible ways to roll each sum are the most important.

Students created a new tab on their Sheets that would capture this information. They went through their own data to find every possible sum, then found the frequency of each sum.

Day 4: Graphing

Students started with a blank graph that included just an x- and y-axis. They wrote appropriate labels for each axis and created a title. Next, they looked at their data to figure out the necessary ranges for each axis then numbered the axes. Finally, students began graphing their data!

Once students completed their graphs, they answered questions as a class such as “Are the results what you expected?” “Why was 6 such a common frequency?” “What could someone learn by looking at your graph?”

<p>Check out my data sheets! Maxwell</p> <p>tinyurl.com/maxwellmath1</p>	<p>Check out my data sheets! Nora</p> <p>tinyurl.com/noramath1</p>
<p>Check out my data sheets! Ryna</p> <p>tinyurl.com/rynamath</p>	<p>Check out my data sheets! Azad</p> <p>tinyurl.com/azadmth</p>
<p>Check out my data sheets! Anika</p> <p>tinyurl.com/anikamath1</p>	<p>Check out my data sheets! Avery</p> <p>tinyurl.com/averymath1</p>
<p>Check out my data sheets! Colby</p> <p>tinyurl.com/colbymath</p>	<p>Check out my data sheets! Neel</p> <p>tinyurl.com/neelmath</p>

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