In this activity, you will:

- Calculate probabilities and compare them to real data
- Explore the relationship between sample size and random variation

|  | What's the probability <br> of getting this roll? | How many times did <br> you get this number? <br> (Tally out of 6 rolls) | How many times did <br> you get this number? <br> (Tally out of 36 rolls) |
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| Sum of 2 <br> Dice | What combination of 2 dice would give you this number? | What's the probability of getting this sum? | How many times did you get this number? <br> (Tally out of 12 rolls) | How many times did you get this number? <br> (Tally out of 36 rolls) |
| :---: | :---: | :---: | :---: | :---: |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |
| 11 |  |  |  |  |
| 12 |  |  |  |  |

Discuss with your partner: How did the probabilities you calculate compare to the real data? Did increasing the number of times you rolled the dice change how your data measured up to the probabilities you calculated? How?

