# The Magic of the Number $7^{1}$ 

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From the beginning of time, the number 7 has been considered a magic number. There are 7 days in a week and 7 wonders of the World, one of which is the Great Wall of China a very small part of which is shown in the photo. This wall is a tremendous 13,170 miles long.


Write the 7 days of the week.

How would school be different if there were 8 days in a week? How many days in a week would you go to school then?

It is 7:00 am on the $7^{\text {th }}$ day of the week of the 7 month of the year of this year. Write the complete date and time.

Write the complete date of the day before this day, and the day after this day.

Draw a clock, put the different times on it, and mark 7 clearly.

Miguel has 2 die (die is the singular for dice, e.g., 1 die, 2 dice, 3 dice ...), each with numbers from 1 to 6 on a side. He wants to think about what numbers you can get when rolling both at the same time and then adding the two numbers together. So, he sets up the table that follows.

At the left of the table are the numbers $1,2,3,4,5$, and 6 which can be rolled with the first of the two dice. At the top are the same six numbers that can be rolled with the

[^0]second of the two dice. The cells in the middle of the table that are empty are for the sum of the numbers from the two dice.

Complete the table by adding the value from the $1^{\text {st }}$ die (at the left of the table) to the value from the $2^{\text {nd }}$ of the die (at the top of the table) for all cells in the table. One value in the middle of the table has already been done for you:

4 (from the left of the table) $\mathbf{+ 3}$ (from the top of the table) $=\mathbf{7}$
The Possible Sums from Rolling 2 Dice

|  | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  | $4+3=7$ |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |

How many different ways are there to roll the number 7 from the sum of 2 dice? In other words, in how many of the cells of the table above is the sum equal to 7 ?


Here are 6 magic hand poses or positions. Try to make each of these with your hand.

Create your own special hand pose to make a $7^{\text {th }}$ hand pose. Do the best you can to draw it here.

Roll 2 dice together, add the numbers and enter a tally mark in the cell of the table corresponding to that outcome. For example, if one roll of the two dice results in the numbers 2 and 5 , enter a tally mark in the ROW with 2 and the COLUMN with 5 . This has already been done for you below.

Tally Marks from Actual Rolls of 2 Dice

|  | 1 | 2 | 3 | 4 | 5 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ |  |  |  |  | 6 |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |


[^0]:    ${ }^{1}$ Suggested Grades: 3-6 Skills: Dates, drawing a clock, identifying possible numbers from 2 rolls of a die, \& tallying sums from actually rolling 2 die ten times. The last 2 items relate to probability and statistics. 2 dice are needed.

