Probability Investigation

You will need **either:** two normal dice (numbered 1 to 6)
or: an online simulation like www.random.org/dice

1. Roll your pair of dice 36 times and keep track of the *total* of the dice rolls.
For example, if you roll a 4 and a 5, just write down 9.

2. Enter your data in the table below:

Roll Number	Two-dice Total
Roll 1	
Roll 2	
Roll 3	
Roll 4	
Roll 5	
Roll 6	
Roll 7	
Roll 8	
Roll 9	
Roll 10	
Roll 11	
Roll 12	
Roll 13	
Roll 14	
Roll 15	
Roll 16	
Roll 17	
Roll 18	
Roll 19	
Roll 20	
Roll 21	
Roll 22	
Roll 23	
Roll 24	
Roll 25	
Roll 26	
Roll 27	
Roll 28	
Roll 29	
Roll 30	
Roll 31	
Roll 32	
Roll 33	
Roll 34	
Roll 35	
Roll 36	

3. Complete the frequency table below.
For instance, if 14 of your rolls gave a total of 9, write down 14 next to 9.

Dice Total	Frequency
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

4. Which totals were the least common?

5. Which totals were the most common?

6. Write down all the possible rolls that give a total of 8. One has been done for you.

Dice 1	Dice 2
2	6

7. Explain why a total of 12 is just as likely as a total of 2.