	Determining Probability - Dice Name:	
Use t also k	he information provided to find the probability. Remember a die has 6 sides and may be called a 'fair number cube.	Answers
	1	
1)	What is the probability of rolling an even number?	2.
2)	What is the probability of rolling an odd number?	
3)	What is the probability of rolling a number higher than 6?	3
4)	What is the probability of rolling an odd number less than 6?	4.
5)	True / False: It is impossible to roll a 12	
6)	True / False: You will definitely roll a number less than 4	5
0)	A 12 sided die.	6.
		7
	Determine the probability if you were rolling a fair number cube .	
7)	What is the probability of rolling an even number?	8
8)	What is the probability of rolling an odd number?	9.
9)	What is the probability of rolling a number higher than 2?	
10)	What is the probability of rolling an odd number less than 5?	10
11)	True / False: It is impossible to roll a 4.	11
12)	True / False: You will definitely roll a number less than 7.	12
		12.
	Determine the probability if you were rolling a 14 sided die.	13
13)	What is the probability of rolling an odd number?	14.
14)	What is the probability of rolling an even number?	
15)	What is the probability of rolling a number higher than 4?	15
16)	What is the probability of rolling an odd number less than 9?	16
17)	True / False: It is impossible to roll a 13.	17
18)	True / False: You will definitely roll a number less than 5.	17. <u> </u>
		18
	A 'die' or 'fair A 20 sided die. number cube'.	
	Math www.CommonCoreSheets.com 3 1-10 94 89 83 78	72 67 61 56 50 44 17 11 6 0

	Determining Probability - Dice Name: Answ	er]	Key
Use t also b		Answers	
	Determine the probability if you were rolling a 7 sided die .	1.	3 out of 7
1)	What is the probability of rolling an even number?	2.	4 out of 7
2)	What is the probability of rolling an odd number?	3	1 out of 7
3)	What is the probability of rolling a number higher than 6?		
4)	What is the probability of rolling an odd number less than 6?	4.	2 out of 7
5)	True / False: It is impossible to roll a 12.	5.	True
6)	True / False: You will definitely roll a number less than 4.	6.	False
	Determine the probability if you were rolling a fair number cube .	7.	3 out of 6
7)	What is the probability of rolling an even number?	8.	3 out of 6
8)	What is the probability of rolling an odd number?		4 out of 6
9)	What is the probability of rolling a number higher than 2?		- out of 0
10)	What is the probability of rolling an odd number less than 5?	10.	2 out of 6
11)	True / False: It is impossible to roll a 4.	11.	False
12)	True / False: You will definitely roll a number less than 7.	12.	True
	Determine the probability if you were rolling a 14 sided die .	13.	7 out of 14
13)	What is the probability of rolling an odd number?	14.	7 out of 14
14)	What is the probability of rolling an even number?	1.5	10 out of 14
15)	What is the probability of rolling a number higher than 4?	15.	10 000 01 14
16)	What is the probability of rolling an odd number less than 9?	16.	4 out of 14
17)	True / False: It is impossible to roll a 13.	17.	False
18)	True / False: You will definitely roll a number less than 5.		
		18.	False
	A 20 sided die. A ale or juir number cube'.		
	Math 39 83 78	72	67 61 56 50 44 11 6 0

Name_____ Name_____ Theoretical and Experimental Probability Investigating Probability



Step 1: Roll two dice 50 times and fill in the table below. To find the **experimental probability** of rolling a particular sum, divide the times a sum showed up by the total number of rolls. **Example:**

Probability of a 7 = $\frac{\text{Number of rolls with a sum of 7}}{\text{Total number of rolls}}$

Sum	2	3	4	5	6	7	8	9	10	11	12
Tally											
Frequency											
Experimental Probability											

<u>Step 2 (Theoretical Probability)</u> Above each number, write all possible ways to achieve the sum written below it.

Sum	2	3	4	5	6	7	8	9	10	11	12
Theoretical Probability											

Conclusion: Using this last table, if you rolled two dice 90 times, how many times would you expect to have a sum of 5?