Chapter 8

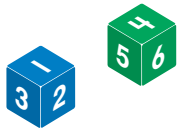
Lesson 4

Name _____ Date/Time _____

Exploring Probability

NCTM Standards 5, 6, 7, 8, 9, 10

Imagine you toss two number cubes, one blue and one green, and find the sum of the results.



1. What sum is most likely? Prediction: _____

2. What results are possible for . . .

   the blue cube? _____ the green cube? _____

3. What sums are possible? _____

4. Complete the table at right to show the sum for each pair of results.

5. How many ways are there to get a total of . . .

   3? _____

   5? _____

   7? _____

The Number on the Green Cube \ The Number on the Blue Cube	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

6. Which sum is most likely? Explain.

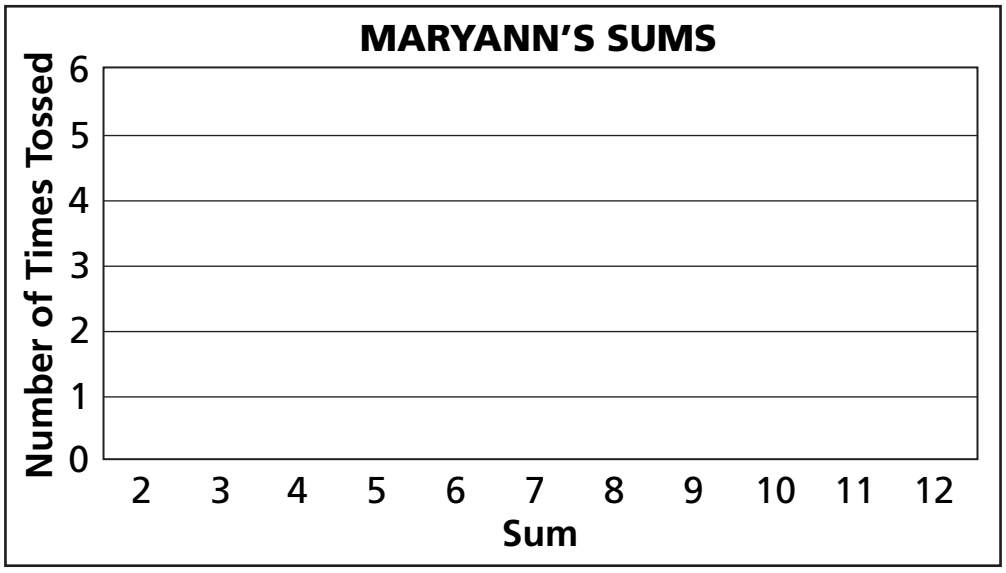
_____

_____

Maryann tossed two number cubes 20 times and wrote the sum each time. Here are her results:

5, 7, 7, 9, 6, 8, 8, 5, 7, 6, 8, 12, 7, 5, 9, 4, 11, 10, 10, 12

7 Complete the bar graph of Maryann's sums.



8 Which sum(s) occurred most often? _____

9 Which sum(s) occurred least often? _____

10 Using the table on the previous page, which sum would you expect to occur more often: 11 or 12? _____

Which of those two sums occurred more often for Maryann? _____

11 **Challenge** Imagine a bag containing 3 green marbles, 2 blue marbles, and 1 red marble. If you reach in without looking and take 2 marbles, what colors could they be? List all the possibilities.

_____