NAME _____ DATE _____

9-2 Make a Table (Pages 437–438)

With a table, you can organize information in an understandable way to help you solve a problem.

Using a Table	• To make a table, decide how many rows and columns you will need, and what the label will be for each row and column. • Be sure to give your table a title. • Then fill in the cells of the table.

EXAMPLE

Use a table to find out how many ways you can roll two six-sided number cubes, one blue and the other red, to get a sum of exactly 6.

You can use a row for each result from the blue number cube and a column for each result for the red number cube. The cells in the table show the sum.

After you complete the table, count how many of the sums are exactly 6. There are 5 ways to get a sum of 6.

	Blue cube					
Red cube	**1**	**2**	**3**	**4**	**5**	**6**
1	2	3	4	5	**6**	7
2	3	4	5	**6**	7	8
3	4	5	**6**	7	8	9
4	5	**6**	7	8	9	10
5	**6**	7	8	9	10	11
6	7	8	9	10	11	12

Try These Together

1. List all the ways that you can you make change for a dollar if the only coins you have are quarters and nickels. How many ways are there?

HINT: Make a table with 2 columns: quarters and nickels.

2. List the ways in which you can pick two prime numbers less than 10 to get a sum that is an even number. How many ways are there?

HINT: Make a table similar to the one above.

PRACTICE

Solve. Use any strategy.

3. If you randomly remove 3 coins from a purse that contains two pennies, a nickel, a dime, and a quarter, what combinations of coins might you get? How many combinations are there?

4. **Carpentry** If you want to build a rectangular porch that is 60 square feet, and its sides are whole numbers of feet, how many different combinations of length and width are possible? Which of the dimensions are unrealistic? (Recall: The area of a rectangle is found by multiplying the length times the width.)

5. **Standardized Test Practice** How many ways can you get a sum of 4 using two six-sided number cubes, one blue and one red?

A 1 way **B** 2 ways **C** 3 ways **D** 4 ways

Answers: **1.** 4Q, 3Q and 5N, 2Q and 10N, 1Q and 15N, 20N; 5 combinations **2.** 3 and 5, 3 and 7, 5 and 7; 3 ways **3.** PPD, PPN, PPQ, PNQ, PND, PDQ, NDQ; 7combinations **4.** 6 combinations; 1×60, 2×30, and 3×20 are unrealistic dimensions **5.** C