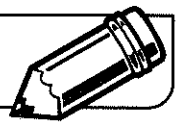
Name Date Time

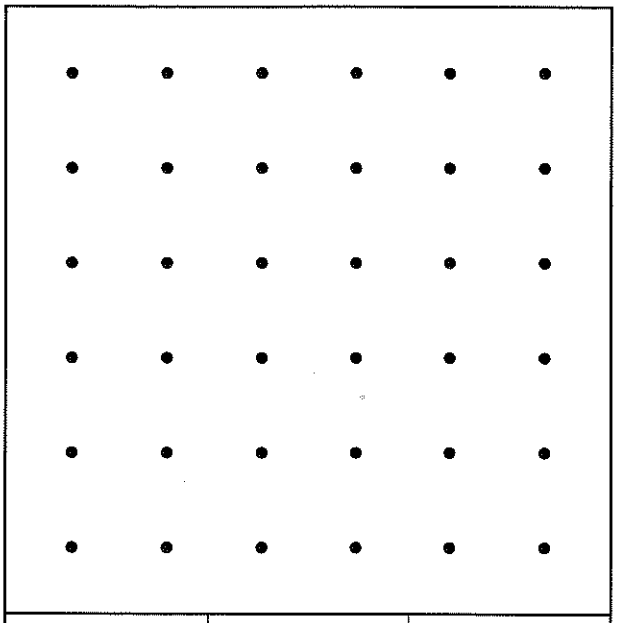
LESSON 1·2

Rows and Columns

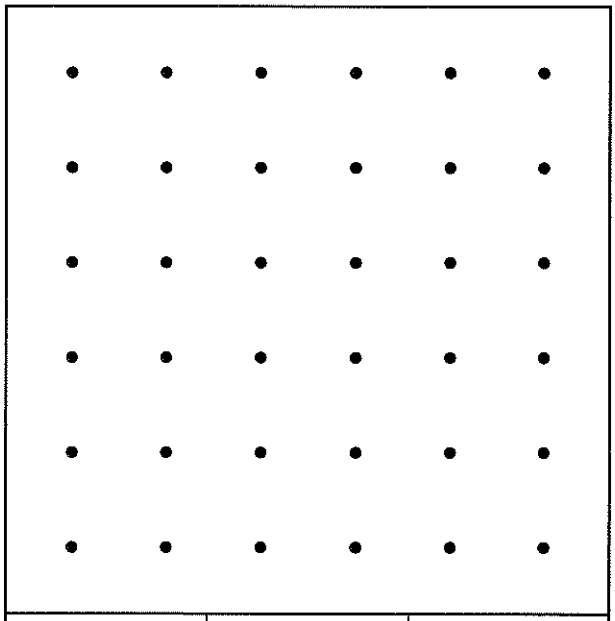


A rectangular array is an arrangement of objects in rows and columns. Each row has the same number of objects, and each column has the same number of objects.

Work with a partner to build arrays. For each array, take turns rolling dice. The first die is the number of rows. Write this number in the table under Rows. The second die is the number of cubes in each row. Write this number under Columns. Then use centimeter cubes to build the array on the dot grid. How many cubes are in the array? Write this number under Array Total on the dot grid table.



Rows	Columns	Array Total



Rows	Columns	Array Total

Name Date Time

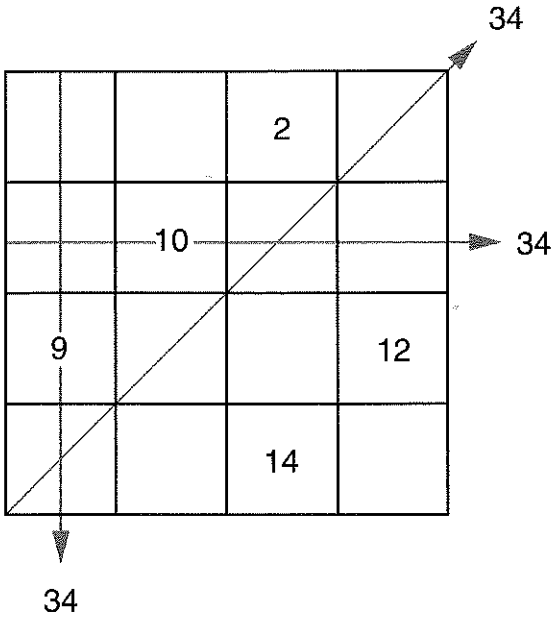
LESSON 1·2

Magic Square and Heterosquare Arrays

A rectangular array is an arrangement of objects in rows and columns. The objects in an array can be numbers or numerical expressions. The Multiplication/Division Facts Table on the inside front cover of your journal is an example of numbers arranged in an array. The objects can also be words or symbols that represent elements of a given situation. For example, a plan for after-school snacks could be arranged in a 1-by-5 array, using *A* for apple, *B* for banana, and so on.

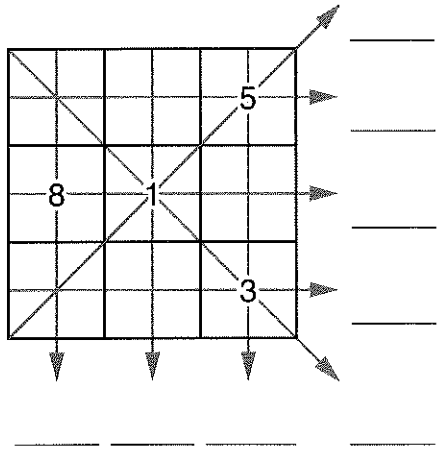
A magic square is an array of positive whole numbers. The sum of the numbers in each row, column, and diagonal will be the same.

1. Complete this magic square.



A heterosquare is like a magic square, except that the sum of the numbers in each row, column, and diagonal are different. A 3-by-3 array for a heterosquare will have an arrangement of the numbers 1–9.

2. Complete this heterosquare, and write the sum for each row, column, and the two diagonals.



3. Create a magic square or heterosquare for your partner to solve.