## Everyday Math

## 11.6

## Connection

In Section 1 (Teaching the Lesson), students are introduced to the Products Table. Have students use Digi Blocks and the array platform to build and record a facts table.

## Materials for small groups

1 array platform or Array Work Mat sheet from Appendix p. 87 120 single blocks and small holders
1 Multiplication Facts activity sheet (next page) per student

## Lesson

- Have each group put one block in the corner (first column, first row) of their array mat. As a class write the total for a $1 \times 1$ array in the first cell of the activity sheet.
- Place a second block in the second column, and write the product of a $1 \times 2$ array (2) in the cell. Continue until the entire row to $10(1 \times 10)$ is complete. Remove the blocks.
- Have students put two blocks in the first column, second column, and so on, and record each product in the matching cells. Repeat with the $3 x$ facts until groups are ready to continue on their own.
- Students complete the table of multiplication facts to 10 $\times 10$.
- To check for understanding, have students make an $8 \times$ 7 array with blocks. Have them explain methods for finding the total number of blocks.

| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| $\times$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

## Multiplication Facts



## Array Work Mat



## Parts and Total

|  | $\xrightarrow{-7}$ | 㐫 | 》 |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \bar{\Pi} \\ & \stackrel{\rightharpoonup}{\circ} \end{aligned}$ |  | 辰 | 戸 |

