

Division Strategy: Partial Quotients

Materials: Division Equations Board (3 digit dividend, one digit divisor)

1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally or diagonally) that you will both solve. Solve each problem using the partial quotients strategy.

Step 1: Write a list of easy facts for the divisor.

Step 2: Subtract from the dividend an easy multiple of the divisor (e.g. 100x, 10x, 5x, 2x). Record the partial quotient in a column to the right of the problem.

Step 3: Repeat until the dividend has been reduced to zero or the remainder is less than the divisor.

Step 4: Add the partial quotients to find the quotient.

Example: $826 \div 6$

Easy Facts for 6	
$2 \times 6 = 12$	$20 \times 6 = 120$
$3 \times 6 = 18$	$30 \times 6 = 180$
$5 \times 6 = 30$	$50 \times 6 = 300$
$10 \times 6 = 60$	$100 \times 6 = 600$

$$\begin{array}{r}
 137 \text{ r}4 \\
 6 \overline{) 826} \\
 \underline{-600} \\
 226 \\
 \underline{-180} \\
 46 \\
 \underline{-42} \\
 4
 \end{array}
 \begin{array}{l}
 100 \times 6 \\
 30 \times 6 \\
 7 \times 6
 \end{array}$$

2. Check your work with your partner. Repeat with another line of four problems.

$192 \div 6$	$724 \div 7$	$155 \div 5$	$129 \div 4$
$157 \div 7$	$373 \div 3$	$336 \div 6$	$209 \div 9$
$191 \div 5$	$242 \div 6$	$288 \div 9$	$180 \div 5$
$684 \div 6$	$163 \div 7$	$208 \div 6$	$428 \div 8$