Name _____

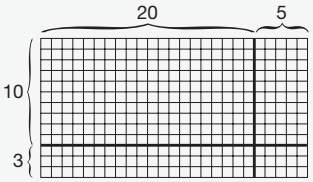
Home-School Connection Topic **8** (English)

Developing Fluency: Multiplying by 2-Digit Numbers

Dear Family,

Your child is learning how to multiply 2-digit numbers by 2-digit numbers. Some of the strategies he or she is learning to use include arrays and expanded and standard algorithms. Below are examples of how to find 13×25.

Use an array.
Add each part of the array to find the product.



$10 \times 20 = 200$
$10 \times 5 = 50$
$3 \times 20 = 60$
$3 \times 5 = 15$
325

Use the expanded algorithm.
Multiply the ones, then the tens. Add the partial products.

$$\begin{array}{r} 25 \\ \times\ 13 \\ \hline 15 \\ 60 \\ 50 \\ +\ 200 \\ \hline 325 \end{array}$$

Multiply the ones.
Multiply the tens.
Add the partial products.

Here is a game you can play together to help your child practice multiplying two-digit numbers.

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Multiplying Game

Materials: 1 number cube (labeled 1–6)

Step 1 Play in pairs. Each player rolls the number cube. Record the number the first player rolls in the tens place and the number the second player rolls in the ones place to create a 2-digit number.

Step 2 Each player rolls the number cube again, recording the numbers in the same way they were recorded in Step 1. Then players complete the multiplication as quickly as they can.

Step 3 When a player has found the answer, he or she says "Done." The other player checks the answer. If it is correct, he or she receives a point. The first player to earn 3 points wins the game.