## Multiply by Two-Digit Numbers

## Dear Family,

## This week your child is learning to multiply two-digit numbers by two-digit numbers.

Your child is learning to multiply a two-digit number by another two-digit number, such as $17 \times 38$.

One way to multiply two-digit numbers is to use an area model. With this strategy, you multiply using the place value of each digit.

The area model below shows the number 17 as $10+7$ at the left of the rectangle as its width and the number 38 as $30+8$ along the top of the rectangle as its length. First, find the individual products that represent each individual area. Then add the products together to find the total area. The total area is the product of 17 and 38 .

| 30 | 8 |  |
| :--- | :--- | :--- |
| 10 | $10 \times 8$ <br> $10 \times 30$ <br> 1 ten $\times 3$ tens $=3$ hundreds <br> 300 | $10 \times 8$ <br> 1 ten $\times 8=8$ tens <br> 80 |
| 7 | $7 \times 30$ <br> $7 \times 3$ tens $=21$ tens <br> 210 | $7 \times 8=56$ |

$300+210+80+56=646$
$17 \times 38=646$
Invite your child to share what he or she knows about multiplying by two-digit numbers by doing the following activity together.

## ACTIVITY MULTIPLYING BY TWO-DIGIT NUMBERS

Do this activity with your child to multiply two-digit numbers.

Materials timer or watch with a second hand

- Together with your child, think of things that can be counted in one minute, such as the number of times you clap your hands or the number of steps you walk.
- Choose one idea. Have one person do the activity while the other person uses a timer or watch to time the activity for one minute.
- The person doing the activity counts how many. Count carefully. Stop counting when the person with the timer says "Stop!" For example, you might clap your hands for one minute and count 92 claps.
- Have your child use that number to figure out how many could be counted in 15 minutes.
For example, to find out the number of times you might clap your hands in 15 minutes, your child would find: $15 \times 92$.
- Have your child multiply to find the answer.
- Switch roles and repeat the activity.

Look for other real-life opportunities to multiply two-digit numbers with your child.


