## Go-Math Lesson 1-5

Algebra - Multiplication Patterns
$3 \times 2=6$
$3 \times 2=6$
$30 \times 2=(3 \times 2) \times 10^{1}=60$

$300 \times 2=(3 \times 2) \times 10^{2}=600$

As the exponent increases, the number of zeros in the product increases.
$3,000 \times 2=(3 \times 2) \times 10^{3}=6,000$
$30,000 \times 2=(3 \times 2) \times 10^{4}=60,000$

## Go-Math Lesson 1-5

Algebra - Multiplication Patterns

$$
\begin{aligned}
& 5 \times 8=40 \\
& 5 \times 80=(5 \times 8) \times 10^{1}=400
\end{aligned}
$$

$5 \times 800=(5 \times 8) \times 10^{2}=4,000$
$5 \times 8,000=(5 \times 8) \times 10^{3}=40,000$
additional zeros in the products.
Why are they there?

## Go-Math Lesson 1-5

## Practice Makes Progress:

$9 \times 5=45$ Always start with the basic multiplication fact!
$(9 \times 5) \times 10^{1}=45 \times 10=450$
$(9 \times 5) \times 10^{2}=45 \times 100=4,500$
$(9 \times 5) \times 10^{3}=45 \times 1,000=45,000$


Once you begin to recognize these patterns, you can begin to use MENTAL Math to solve problems very quickly!

## $8 \times 8 \times 10^{4}=$

First do the basic fact of $8 \times 8$ in your head. Got it?
Next, look at the exponent. What is it?
Then place that many zeros after the basic fact product. Your answer is $640,000!$ !

## Go-Math Lesson 1-5

Your tasks:

1. Complete Google Classroom assignments
2. Complete Think Central assignments
3. Watch videos posted on the website
4. Complete IXL Skills for the week

You have a lot to do - Don't waste time!

