

## Lesson 4: Standard Algorithm: One-digit and Multi-digit Numbers with Composing

- Let's use the standard algorithm to multiply one-digit numbers and multi-digit numbers.

### Warm-up: Number Talk: Partial Product

Find the value of each product mentally.

- $3 \times 3$

- $3 \times 20$

- $3 \times 600$

- $3 \times 623$

## 4.1: Compose with the Standard Algorithm

Here is how Han calculated  $318 \times 3$  using partial products.

$$\begin{array}{r}
 318 \\
 \times 3 \\
 \hline
 24 \\
 30 \\
 + 900 \\
 \hline
 954
 \end{array}$$

Here is how Elena calculated  $318 \times 3$  using the standard algorithm.

$$\begin{array}{r}
 2 \\
 318 \\
 \times 3 \\
 \hline
 954
 \end{array}$$

1. What does the 2 in Elena's calculation represent? Explain or show your reasoning.
  
2. What does the 5 in Elena's solution represent? Explain or show your reasoning.

## 4.2: Use the Standard Algorithm

Calculate each product using Elena's strategy.

1.  $3,615 \times 4$

2.  $16,023 \times 3$

3.  $27,326 \times 3$

4.  $10,215 \times 6$