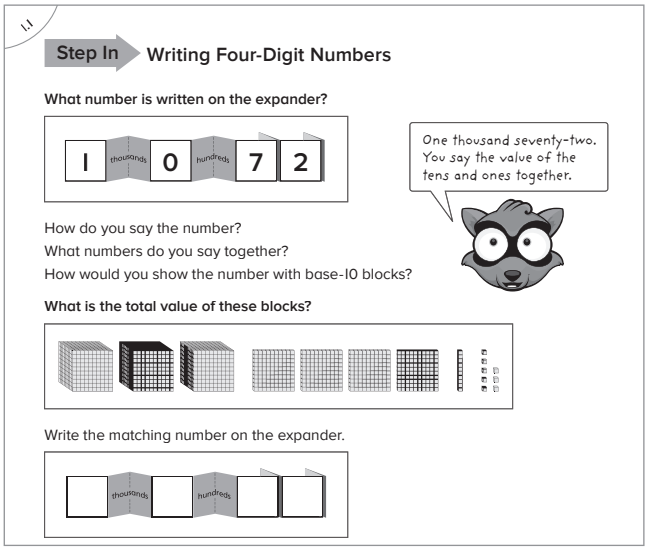
ORIGO STEPPING STONES TEXAS

Core Focus

- Reading and writing four-digit numbers
- Locating four-digit numbers on a number line, working with place value, comparing, and ordering
- Reviewing multiplication concepts and the array model of multiplication
- Investigating and reinforcing the multiplication facts for tens and fives

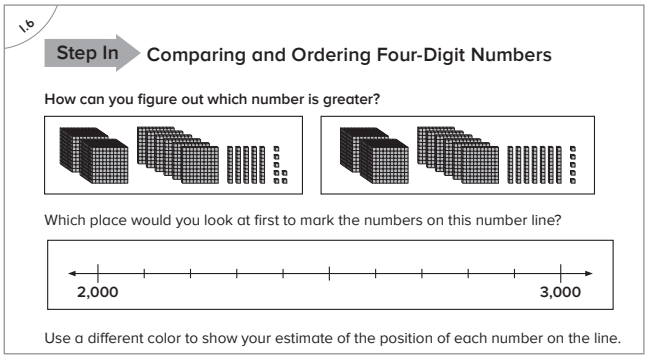
Numbers in Base-10

- Once base-10 place value is understood for numbers up to several hundreds, students know just about everything necessary to work with large numbers.
- In this module, students extend their understanding of one-, two-, and three-digit numbers to four-digit numbers.



In this lesson, students use base-10 blocks and numeral expanders to write four-digit numbers.

- Essential base-10 concepts are practiced by locating numbers on a number line; comparing and ordering numbers; and working with place value using mathematical language: "thousands, hundreds, tens and ones".



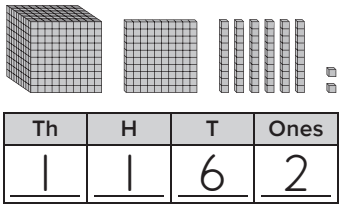
In this lesson, students use a number line and a place-value strategy to compare and order four-digit numbers.

Ideas for Home

- Read house numbers, video-game scores, or highway signs to practice saying 3- and 4-digit numbers.
- Reinforce place-value language by asking, "How many thousands, hundreds, tens, and ones?"
- When writing checks, demonstrate how amounts are written out in words.
- If four-digit numbers seem easy for your child, find larger numbers – millions, billions, or even trillions, by looking for and reading how many "hits" a website has gotten, for instance.

Glossary

- A **place-value chart** is used to record large quantities into their place values.



Th	H	T	Ones
1	1	6	2

- A **numeral expander** shows how each position in a number represents a designated place value.

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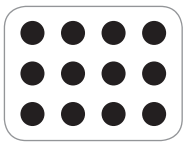
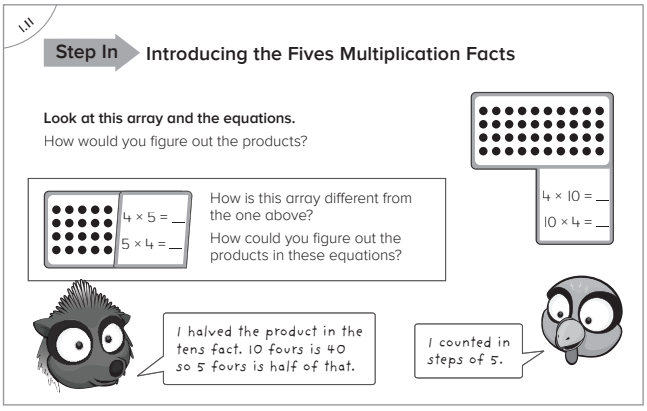
Multiplication

- Multiplication is a major focus in Grade 3. One way to think about multiplication is by visualizing a collection of equal-sized groups.
- Another way to think about multiplication is by arranging objects in an array (rows and columns). For example, 3 rows with 4 in each row can illustrate 3 × 4 (as shown below).



- Recognizing the commutative property for multiplication (3 × 4 = 4 × 3) makes some computations easier to do.



In this lesson, an array is used to show how a known tens fact can help figure out a fives fact.

Ideas for Home

- Look for groups of five and ten in your home, at the store, and the area you live in.
- Ask your child to solve real-world problems such as, "There are 4 people in our family. Each person eats 5 apples a week. How many apples do we need to buy at the grocery store?" Remember to ask them to explain how they know.

- This is an **equation**. An equation must include the equals symbol (=).

$$4 \times 5 = 20$$

factors product

- The **commutative property** allows the order of the factors to be changed without changing the product.

$$4 \times 5 = 5 \times 4$$

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