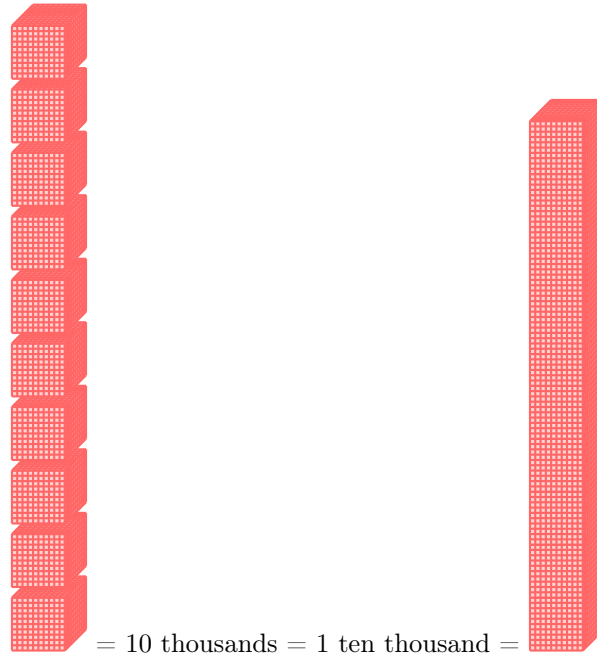


5-DIGIT NUMBERS

A BUILDING NUMBERS

Discover: From Thousands to Ten Thousands We have learned to group ones, tens, and hundreds. The pattern continues! To build even bigger numbers, we group thousands.

We group 10 thousands together to make **1 ten thousand**:



Our place value table now needs a new, larger column for **Ten Thousands**.

Ten Thousands	Thousands	Hundreds	Tens	Ones
1	2	4	3	5
				

This table shows we have **1 ten thousand**, **2 thousands**, **4 hundreds**, **3 tens**, and **5 ones**. This makes the number 12 435.

Definition 5-Digit Number

In the base 10 system, the place of a digit in a number determines its value. We can show a number like 12 435 in many different ways:

- **With digits:**

12 435

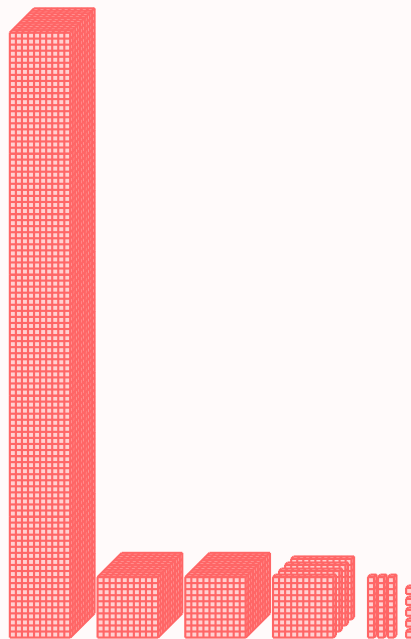
- **In expanded form:**

$$\begin{array}{ccccccccc} 1 \text{ ten thousand} + & 2 \text{ thousands} + & 4 \text{ hundreds} + & 3 \text{ tens} + & 5 \text{ ones} \\ 10\,000 + & 2\,000 + & 400 + & 30 + & 5 \\ 1 \times 10\,000 + & 2 \times 1\,000 + & 4 \times 100 + & 3 \times 10 + & 5 \times 1 \end{array}$$

- **With words:** twelve thousand, four hundred thirty-five
- **In a place value table:**

Ten Thousands	Thousands	Hundreds	Tens	Ones
1	2	4	3	5

- **With blocks:**



B ON THE NUMBER LINE

A number line helps us see numbers in order. We can use it to count by ones, or we can make bigger jumps to count faster. With large numbers, we can imagine number lines that jump by hundreds or even thousands at a time!

- Counting by tens: 0, 10, 20, 30...
- Counting by hundreds: 0, 100, 200, 300...
- Counting by thousands: 0, 1 000, 2 000, 3 000...

Definition Number Line

A **number line** is a line that shows numbers in order. Moving right adds by same number.

