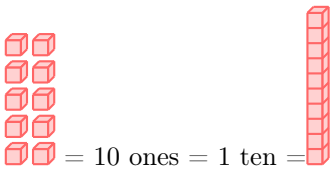
3-DIGIT NUMBERS

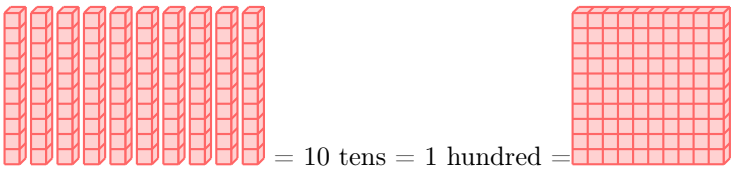
A BUILDING NUMBERS

Discover: From Ones to Hundreds To build bigger numbers, we group smaller ones together.

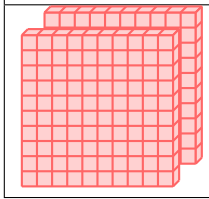
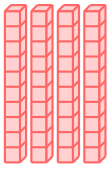
- First, we group 10 ones to make 1 ten:



- Next, we group 10 tens to make 1 hundred:



We can use a place value table to see how many hundreds, tens, and ones are in a number.

Hundreds	Tens	Ones
2	4	3
		

This table shows we have **2 hundreds**, **4 tens**, and **3 ones**. This makes the number **243**.

Definition **Digits**

The symbols we use to write numbers are called **digits**. There are ten digits we use to build every number.

Word	**Digit**	**Cubes**
zero	0	
one	1	
two	2	
three	3	
four	4	
five	5	
six	6	
seven	7	
eight	8	
nine	9	

Definition **Base 10 system**

In the base 10-system, the place of a digit tells us its value. We can show a number in many different ways:

- **With digits**:

243

- **In expanded form**:

2 hundreds +	4 tens +	3 ones
200+	40+	3

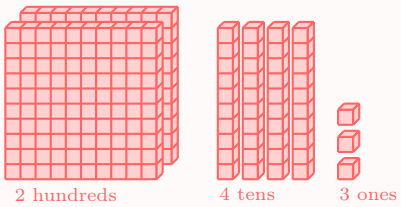
- **With words**:

two hundred forty-three

- **In a place value table**:

Hundreds	Tens	Ones
2	4	3

- **With blocks**:



- **with digits**:

243

- **in expanded form**:

2 hundreds +	4 tens +	3 ones
200+	40+	3

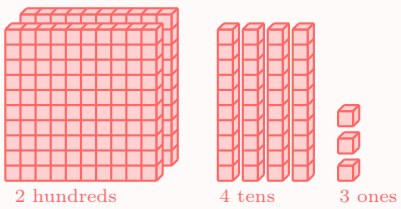
- **with words**:

two hundred forty-three

- **in a table**:

Hundreds	Tens	Ones
2	4	3

- **with cubes**:

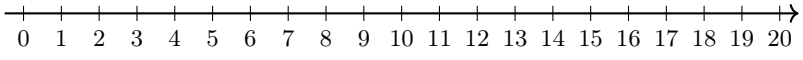


Zero is a special digit. It acts as a **placeholder** to show that a place is empty. For example, in the number 20, the zero shows there are no ones.

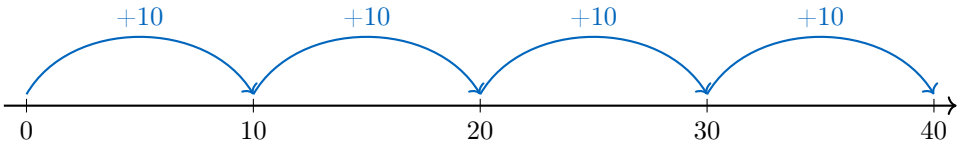
B ON THE NUMBER LINE

Discover:

- A number line shows numbers in order, like a long ruler. The numbers get bigger as we move to the right.



- To count big numbers faster, we can take big jumps of 10! This is called **counting by tens**. We say: "ten, twenty, thirty..."



Definition **Number Line**

A **number line** is a line that shows numbers in order from smallest to largest. The distance between each number is always the same.