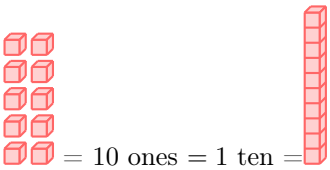
3-DIGIT NUMBERS

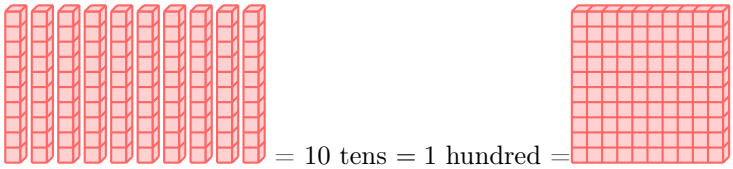
A DEFINITIONS

Discover:

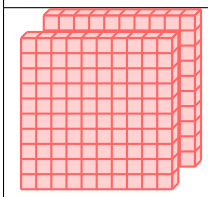
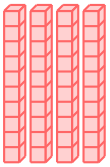
- We can group 10 ones into 1 ten:



- We can also group 10 tens into 1 hundred:



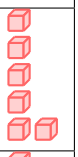
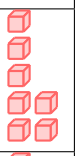
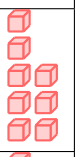
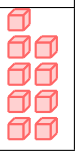
- To count how many hundreds, tens, and ones there are, we can make a table:

Hundreds	Tens	Ones
2	4	3
		

The table tells us we have **2 hundreds**, **4 tens**, and **3 ones**, which we can write in positional notation as **243**.

Definition **Digits**

A digit is a single symbol representing a number.

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 in a number determines its value. We can represent a number:

- **with digits**:

243

- **in expanded form**:

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

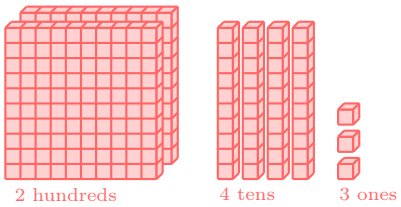
- **with words**:

two hundred forty-three

- **in a table**:

Hundreds	Tens	Ones
2	4	3

- **with cubes**:

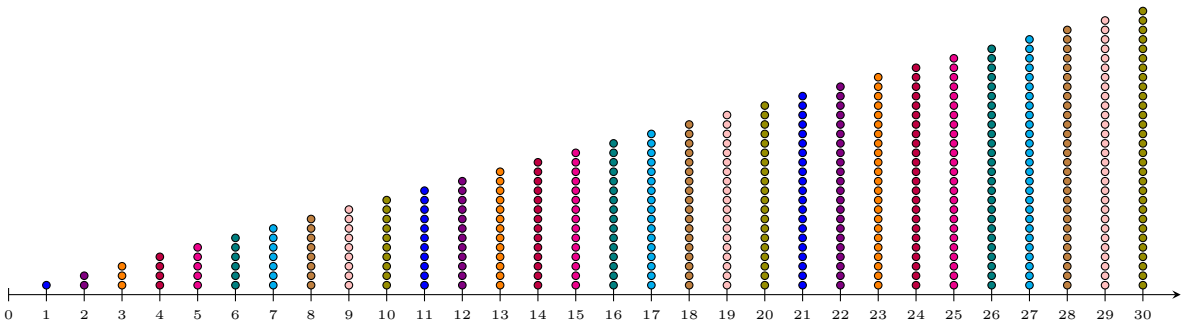


Zero acts as a placeholder to show there is nothing in a certain position. For example, in 20, zero shows there are no ones.

B ON THE NUMBER LINE

Discover:

- A number line shows numbers like 0, 1, 2, 3, and so on in order.



- Let's make counting easier by counting by tens on our number line. Now we jump 10 at a time: 0, 10, 20, 30.

Definition **Number Line**

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