

This bundle gives you 30 detailed lessons that will help your children develop a deeper understanding of numbers and what they represent...and at the end you will also have laid a strong foundations to jump into adding and subtracting.

Each lesson can be used in a **kindergarten**, **first**, **or second grade classroom**. There are printables for each level and directions on how to tailor the lesson to your child's level.

Hundreds Chart: Get children counting and exploring numbers with these 10 lessons. Children will be analyzing numbers, looking for patterns, practice counting to 1,000 (if needed) and practice writing numbers.

**Base Ten Blocks:** Base ten blocks help children visualize what a number looks like. Through these 10 lesson children will build numbers, compare numbers, practice regrouping, and conquer one more/less, ten more/less, hundred more/less.

Number Line: These 5 lessons get children playing on the number line with games and task cards. Toward the end of the unit, they will even be adding and subtracting on it!!!

**Decomposing Numbers:** With 5 more scripted lessons, your children will work on expanded form, basic addition and subtractions facts, and mental math skills.

What's Happening in This Activity:

This lesson gets children rolling dice and building numbers with base ten blocks.

Related Activities to Use:

After this Activity: STEM Project Race to 100!

#### Questions to Ask:

- What number is in the 10's place?
- How do we represent this digit?
- How many cubes are in a long?
- What numbers are in the 1's place?
- How do I represent it?

#### Materials:

- Base Ten Blocks or snap cubes for Kindergarten
- Place value mats
  - Two or three die

#### Prep Work:

- 1. Print off mats.
- Tape the hundreds and thousands mat to the ones and tens mat.
- 3. Laminate for
- durability.

### Before the Activity:

This activity is designed to be used for small group instruction. After this has been taught, you can use it in a center for extra practice.

Begin by writing the number one on the board and have the students choose a base ten block to represent it.

"Yes, this cube (show one cube) represents one. If I want to model two, I get out two cubes. (Get out 2 cubes and count them.) One, Two"

"Now, can you show me what nine would look like?"

"Very good. Now let's look at the number 10. How is it different than the number nine?"

"Very good! The nine only has one digit and the ten has two. See the nine only has one digit. It means we just have nine ones. But when we move to the 10, something very special happens. We have one digit (point to the zero) that tells us how many ones we have. Then we move to this digit and it tells me how many tens we have." (Point to the 1).

"When we get to 10, we get to bundle all our ones up. Look at this long, how many cubes are in the long?"

"Yes, there are 10. We use the long to represent 10."

#### Before the Activity:

#### "Now how do you think we should make the number 11?"

Let them play around with it and see what they come up with! If they don't use one long and one cube, ask them questions to see if you can find the misconception. You can ask them to, "Show me how this equals 11?" This will either help them see that it really doesn't equal 10 or show you how why they choose those blocks.

"Very good! I see that you have one long and one cube. When we look at the number 11, we see that there is a one in the ones place (write 11 on a board and as you are speaking, write ones under the ones place and tens under the tens place) and a 1 in the tens place. This means that I need one long for my tens and one cube for my ones place."

Without erasing the ones and tens place, write a new number like 19.

"Can you show me what 19 will look like?"

Again, if they get it wrong, ask questions to determine where they are not understanding. Then as you are explaining the correct answer, try to address that misconception.

"Awesome, now do you think you can show me 20?"

Write 20 on the board, making sure the 2 is in the tens place and a zero in the ones place.

### Before the Activity:

"Yes, you got it right. See, we have two tens. This means I need two longs. And there is a zero in the ones place, so I don't need any cubes."

If a child is struggling, you can count the cubes in the longs to show that you have 20. Or you can count by 10's if they are comfortable with that concept.

The numbers used are just examples. If you are working with second graders you may want to use numbers like 199, 999, etc.

### Activity Time:

After your students are doing well with building the numbers you have given them, it is now time for the activity!

Provide them with two or three die (depending on the level), and let them roll.

Next, have them place the die in the boxes at the top.

The next step is to write the number they will be building using the lines.

Finally, they build the number using base ten blocks.

## After the Activity:

After the activity, do a short review. Choose one of these questions to facilitate the review.

- 1. What place value is this? How do I represent it?
- 2. Show them some base ten blocks and ask what number it is. How do you know?
- 3. How would I build this number? How do you know? Can you prove that you built the right number?

Standards:

### Kindergarten:

- Write numbers from 0 to 20.
- Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- Compose and decompose numbers from 11 to 19 into ten ones and some further ones,

### 1<sup>st</sup> Grade:

- Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
- Understand that the two digits of a two-digit number represent amounts of tens and ones.
- 10 can be thought of as a bundle of ten ones called a "ten.
- The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

## 2<sup>nd</sup> Grade:

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:
- 100 can be thought of as a bundle of ten tens called a "hundred."
- The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- Count within 1000; skip-count by 5s, 10s, and 100s.
- Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

FAXXXXXXX	XXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	One	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Ten	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	YYYYY	

1	7
2	8
3	9
4	10
5	11
6	12

13	19
14	20
15	21
16	22
17	23
18	24

	K.
Write: Ones	5 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
	소소소
Build: Tens	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

	Ones	
Write:	Tens	

