1st Grade Math: Place Value

Understanding **place value** is essential in learning how numbers work. Place value tells us what each digit in a number represents based on its position.

What is Place Value?

Each digit in a number has a value depending on where it is located, or its "place." In a two-digit number, one digit tells how many **tens** there are, and the other tells how many **ones** there are.

For example, in the number **23**:

- The **2** is in the **tens place**, so it represents **20**.
- The **3** is in the **ones place**, so it represents **3**.

Tens and Ones

- **Ones**: These are single units. The rightmost digit in a number represents the number of ones.
- **Tens**: When you have 10 ones, they make a **ten**. The second digit from the right represents how many groups of ten there are.

Let's look at more examples:

1. **45**:
   a. **4** is in the **tens place**, so it means **4 tens** (which equals **40**).
   b. **5** is in the **ones place**, so it means **5 ones**.
2. **16**:
   a. **1** is in the **tens place**, so it means **1 ten** (which equals **10**).
   b. **6** is in the **ones place**, so it means **6 ones**.

Breaking Down Numbers

Let's break down the number **37**:

- **3** tens = **30**.
- **7** ones = **7**.

So, **37** is the same as **30 + 7**.

Visualizing with Base Ten Blocks

Base ten blocks are great tools for learning place value. They come in:

- **Single cubes** to represent ones.
- **Tens rods** to represent groups of 10.

For example, the number **42**:

- Use **4 tens rods** to represent 40.
- Use **2 single cubes** to represent 2.

Place Value Practice

1. **Identify place value**:
   a. In the number **58**, what does the 5 represent? (Answer: **50**, because it's in the tens place.)
   b. In the number **69**, what does the 9 represent? (Answer: **9**, because it's in the ones place.)
2. **Break down numbers**:
   a. **24** is the same as **20 + 4**.
   b. **71** is the same as **70 + 1**.

Why is Place Value Important?

Place value helps us understand the size of numbers and is the foundation for learning to add, subtract, and even multiply or divide. It also helps when comparing numbers or understanding large numbers.

Conclusion

Place value shows how each digit in a number has a specific value based on its position. Learning about **tens** and **ones** helps students understand numbers better and prepares them for more advanced math!