# Understanding Place Value to Millions

**Objective:** Students will be able to understand and identify place values up to the millions place.

## Assessment:

Students will complete a place value chart that includes numbers with values in the ones, tens, hundreds, thousands, ten thousands, hundred thousands, and millions places. They will also answer word problems that require them to identify and explain the place value of specific digits in given numbers.

## Key Points:

- **Place Value:** The value of a digit depending on its position in a number (e.g., in the number 5,432, the '5' represents five thousand).

- **Digits in Numbers:** Understanding that numbers are composed of individual digits, each having its own place value.

- **Value of Each Place:** Recognizing the value of each place from ones to millions.

- **Breaking Down Numbers:** The ability to break down larger numbers into their place value components (e.g., 2,345 = 2,000 + 300 + 40 + 5).

- **Common Misconception:** Students may confuse the value of a digit with its face value (e.g., thinking that the '5' in 5,432 is just five rather than five hundred).

## Opening:

- Begin with a brief discussion about the importance of numbers in everyday life (e.g., telling time, distances, money).

- **Hook Activity:** Show a large number on the board (e.g., 8,765,432) and ask students what they think it represents. Encourage them to share their thoughts in pairs before discussing as a class.

## Introduction to New Material:

- Introduce the concept of place value using a place value chart that displays each digit's position and value.

- Demonstrate how to read and write large numbers, emphasizing how the value changes based on position.

- Use a number line to show the progression of numbers and their place values.

- Anticipate the misconception that students might think the value is just the digit itself rather than its position.

## Guided Practice:

- Provide students with a variety of numbers to practice identifying place values in pairs.

- Start with simple numbers and gradually increase the complexity (e.g., 56, 1,234, 12,345, 123,456, 1,234,567).

- Encourage students to explain their thought process when identifying the place value of specific digits.

- Monitor student performance by circulating the room and providing feedback.

## Independent Practice:

- Assign a worksheet that requires students to fill in a place value chart for different numbers and answer questions related to identifying place values.

- Set clear expectations for silent work time and encourage students to show their work.

- Circulate to assist students who may struggle with the material.

## Closing:

- Conduct a quick review by asking students to share one thing they learned about place value.

- Use a quick quiz with a few numbers on the board, asking students to call out the value of a specified digit in each number.

## Extension Activity:

- Challenge students who finish early to create their own large number and illustrate it with a place value chart, including a short explanation of each digit's value.

## Homework:

- Assign a worksheet that includes practice problems focused on identifying and explaining place values in various numbers, reinforcing the day's lesson.

## Standards Addressed:

- **CCSS.MATH.CONTENT.4.NBT.A.1**: Explain why a digit in one place represents ten times what it represents in the place to its right.

- **CCSS.MATH.CONTENT.4.NBT.A.2**: Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.