

Max's Magnificent Place Value Expedition

Master the millions! Unlock the secrets of every digit with Max the Monkey.

- The position of a digit determines its magnitude; for example, in the number 452,109, the '4' represents four hundred thousand, while the '9' represents nine ones.
- When we partition numbers, we break them into their constituent parts, such as $734,562 = 700,000 + 30,000 + 4,000 + 500 + 60 + 2$.
- Decimal place value follows the same pattern as whole numbers but moves to the right of the decimal point, representing fractions like tenths (0.1) and hundredths (0.01).
- Multiplying by 10, 100, or 1,000 shifts digits to the left, increasing their value by one, two, or three places respectively.
- Dividing by 10, 100, or 1,000 shifts digits to the right, decreasing their value and moving them behind the decimal point if necessary.
- Place value holders, such as zero, are essential to ensure digits occupy the correct column, keeping the total value of the number accurate.

Did you know? Did you know? Even though a digit stays the same, its value changes entirely depending on where it sits in a number! A '5' in the millions column is worth five million, but a '5' in the thousandths column is worth only five small pieces of a whole.

Key vocabulary: Partitioning · Place Value · Tenths · Hundredths · Thousandths · Decimal Point · Digit · Magnitude