

Max's Masterclass: The Power of Place Value

Get ready to climb the mountain of millions with Max the Monkey—every digit has a home!

- The position of a digit determines its value. In the number 472,109, the digit 7 represents seven ten-thousands (70,000).
- The decimal point separates whole numbers from parts of a whole. Digits to the right of the point represent fractions, such as tenths, hundredths, and thousandths.
- When you multiply a whole number by 10, every digit shifts one place to the left, and a zero acts as a placeholder in the ones column.
- When you divide a whole number by 10, every digit shifts one place to the right, and the number becomes ten times smaller.
- In a number like £12.50, the '5' is in the tenths column, representing 50 pence, because 5 tenths is equivalent to 50 hundredths.
- Placeholders like zero are essential. Without them, we wouldn't be able to tell the difference between 402 and 42!

Did you know? Did you know? Even though a digit like '5' always looks the same, its value changes completely depending on where it sits. In the number 500,000, that 5 is worth five hundred thousand, but in 0.05, it is only worth five hundredths!

Key vocabulary: Place value · Digit · Ten-thousands · Hundred-thousands · Decimal point · Tenths · Hundredths · Thousandths