What the Numbers After the Decimal Point Really Mean

KS2 MATHS Ages 9-12 ⏰ 3 min read

What Is a Decimal Point?

A **decimal point** is a tiny dot that sits between whole numbers and fractions. It tells us exactly where the **whole number** ends and the **fractional part** begins. Think of it like a bridge connecting two different worlds: the world of whole things and the world of pieces.

When you see a number like **3.5**, the **3** is a whole number (three complete things), and the **.5** means half of another thing. The decimal point is the referee that keeps them separate and organized.

Understanding Place Values After the Decimal

Just like digits before the decimal point have special places—ones, tens, hundreds—the digits after the decimal point have their own places too. The first digit after the decimal is the **tenths place**, which means it's worth one-tenth (or **0.1**). The second digit is the **hundredths place**, worth one-hundredth (or **0.01**). The third is the **thousandths place**, and so on.

Think of it like money: if you had **£3.50**, that's three whole pounds and fifty pence. The decimal point separates the pounds from the pence, so you know exactly how much you have.

Real-Life Uses of Decimals

Decimals are everywhere in real life. When you measure your height as **1.65 metres**, the **.65** tells you about the extra centimetres beyond one whole metre. When you buy something costing **£2.99**, the decimal separates pounds from pence. Scientists use decimals to measure tiny things like the thickness of hair or the temperature of water.

Without decimals, we'd struggle to describe anything that isn't a whole number. They give us **precision**—the ability to be exact about measurements and amounts.

How to Read and Write Decimals

When you see **4.37**, you say it as "four point three seven" (not "four point thirty-seven"). Each digit after the decimal is read individually. This helps you understand exactly which place each digit occupies.

Think of it like a address: **42 Oak Street** is more precise than just "somewhere on Oak Street." Similarly, **0.42** is much more precise than just "zero point something."

Decimals might seem tricky at first, but they're simply a way of writing down parts of wholes. Once you understand that the decimal point marks the boundary, everything after it makes much more sense!