

## DECIMAL FRACTIONS

A decimal fraction looks different to the fractions you already know.



It is written as a number with a **decimal point** and **decimal places** to the right of the point.

For example, 0.5 is a decimal fraction.

Find out here:

**0.5 = decimal fraction**

- what a decimal fraction is
- how to change a decimal fraction to a normal fraction
- how to work out a decimal fraction of a number.

Decimal fractions have a decimal point, and numbers to the right of the decimal point that tell you what the decimal fraction is.

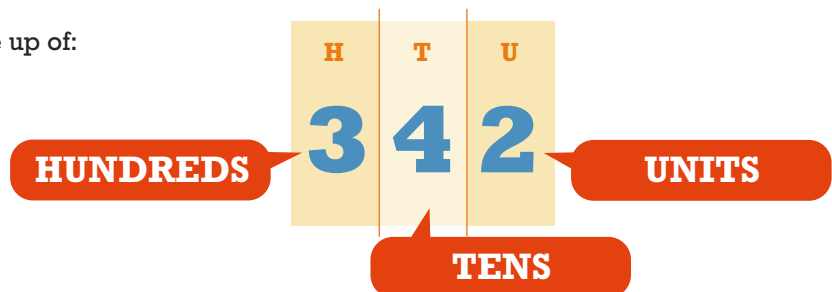
For example, 0.75 is a decimal fraction.

### How decimals work

Your child will already know about **hundreds**, **tens** and **units** in whole numbers.

For example, the number 342 is made up of:

- 3 hundreds
- 4 tens
- and 2 units.



In **decimal fractions**, there are columns to the right of the decimal, called decimal places. The first two columns (or decimal places) are **tenths** and **hundredths**.

- One tenth is written 0.1 as a decimal fraction.
- One hundredth is written 0.01 as a decimal fraction.



**SEVEN TENTHS**

**FIVE HUNDREDTHS**

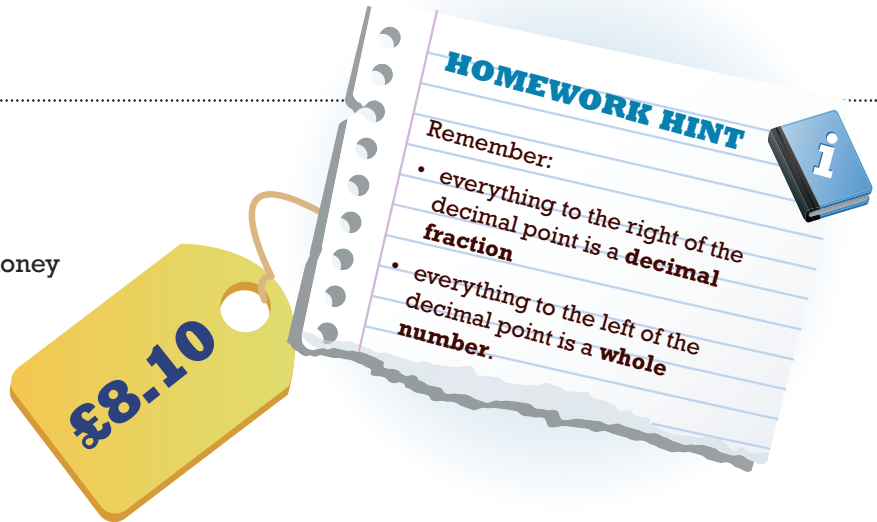
For example, the decimal fraction 0.75 is made up of:

- 7 tenths ( $\frac{7}{10}$ )
- and 5 hundredths ( $\frac{5}{100}$ )

## Money and decimals

You're probably used to seeing money written as decimals.

For example, **£8.10** means 8 whole pounds, and 10p (or  $\frac{1}{10}$  of a pound)



Another example - £0.25 means 25p, or  $\frac{25}{100}$  of a pound.

## Converting decimal fractions to normal fractions

- Use your decimal conversion table to help you out.
- Look at the decimal fraction column to find your decimal fraction.
- Find the value of the fraction in the row beside it.
- For example – if you look up decimal fraction 0.5, the fraction beside it is  $\frac{1}{2}$ .
- This means **0.5 is the same value as  $\frac{1}{2}$ .**

Fractions	Decimal Fractions	Percentages
$\frac{1}{2}$	0.5	50%
$\frac{1}{3}$	0.33	33.3%
$\frac{1}{4}$	0.25	25%
$\frac{1}{10}$	0.1	10%
$\frac{1}{5}$	0.2	20%
$\frac{3}{4}$	0.75	75%
1	1.0	100%
$\frac{1}{100}$	0.01	1%

That's all you have to do!

$$\frac{1}{2} = 0.5$$

**FRACTION**

**DECIMAL FRACTION**