



# Decimals

## Key vocabulary

|                      |                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Decimal</b>       | A decimal number can be defined as a number whose whole number part and the fractional part is separated by a decimal point                     |
| <b>Tenths</b>        | Children understand that a tenth is a part of a whole split into 10 equal parts. 0.1 as a decimal and $\frac{1}{10}$ as a fraction.             |
| <b>Hundredths</b>    | Children understand that a hundredth is a part of a whole split into 100 equal parts. 0.01 as a decimal and $\frac{1}{100}$ as a fraction.      |
| <b>Decimal point</b> | A 'dot' that separates the whole number from the fractional part e.g 2.4. The digits following the decimal point show a value smaller than one. |

## Decimals as tenths

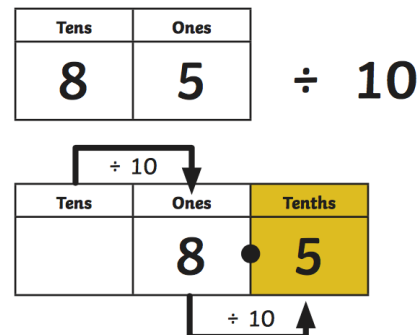
| Image | Words      | Fraction       | Decimal |
|-------|------------|----------------|---------|
|       | Six tenths | $\frac{6}{10}$ | 0.6     |
|       | Two tenths | $\frac{2}{10}$ | 0.2     |

## Decimals as hundredths

| Image | Words              | Fraction                           | Decimal |
|-------|--------------------|------------------------------------|---------|
|       | Seven hundredths   | $\frac{7}{100}$                    | 0.07    |
|       | Seventy hundredths | $\frac{70}{100}$ or $\frac{7}{10}$ | 0.7     |

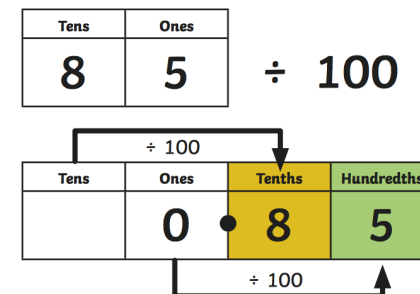
## Dividing by 10

To divide the number by 10, we move the counters one column to the right.



## Dividing by 100

To divide the number by 100, we move the counters two columns to the right.



## Fraction to Decimal Equivalences

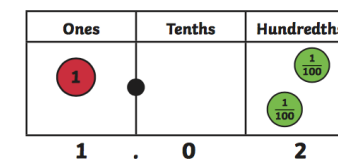
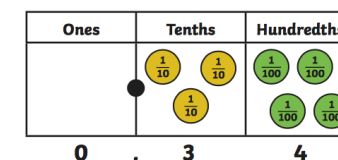
$$\frac{1}{2} = \frac{1}{2} = 0.5$$

$$\frac{1}{4} = \frac{1}{4} = 0.25$$

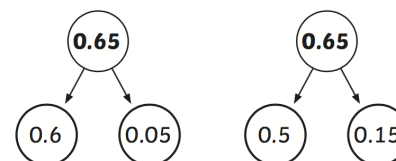
$$\frac{3}{4} = \frac{3}{4} = 0.75$$

$$\frac{1}{10} = \frac{1}{10} = 0.1$$

## Comparing Decimals



## Partitioning



## Making a whole

