

Decimals

Knowledge Organiser

Key Vocabulary

tenths

hundredths

decimal tenths

decimal hundredths

decimal equivalents

part-whole model

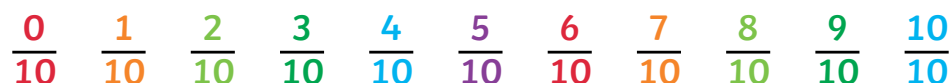
rounding

decimal point

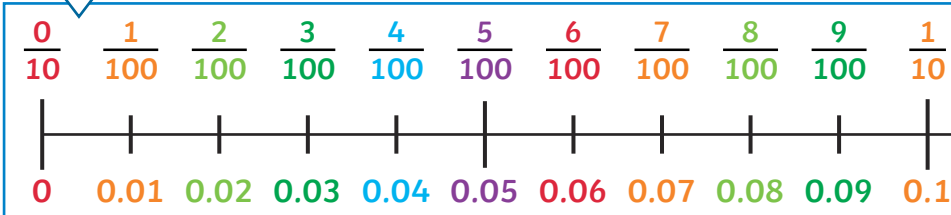
place value

Tenths and Hundredths

Tenths



Hundredths



Fraction and Decimal Equivalents

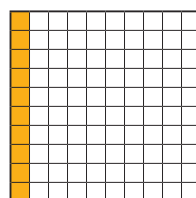
$$\frac{1}{2} = 0.5$$

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

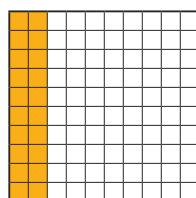
$$\frac{3}{4} = 0.75$$

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

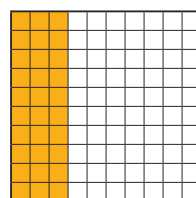
Tenth and Hundredth Decimal Equivalents



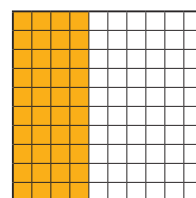
$$\frac{1}{10} = \frac{10}{100} = 0.1$$



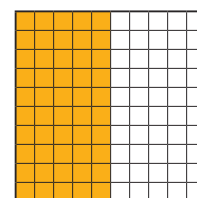
$$\frac{2}{10} = \frac{20}{100} = 0.2$$



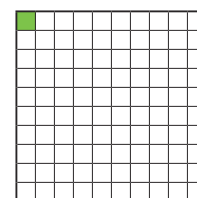
$$\frac{3}{10} = \frac{30}{100} = 0.3$$



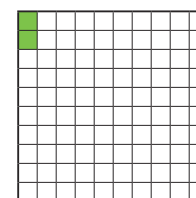
$$\frac{4}{10} = \frac{40}{100} = 0.4$$



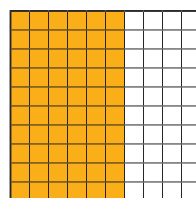
$$\frac{5}{10} = \frac{50}{100} = 0.5$$



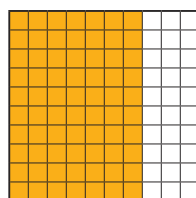
$$\frac{1}{100} = 0.01$$



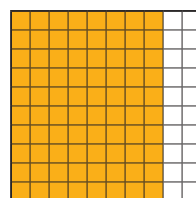
$$\frac{2}{100} = 0.02$$



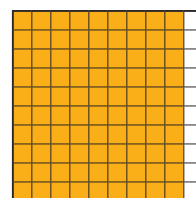
$$\frac{6}{10} = \frac{60}{100} = 0.6$$



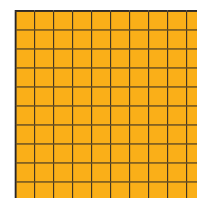
$$\frac{7}{10} = \frac{70}{100} = 0.7$$



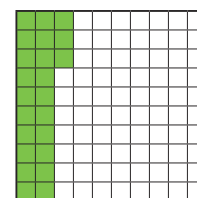
$$\frac{8}{10} = \frac{80}{100} = 0.8$$



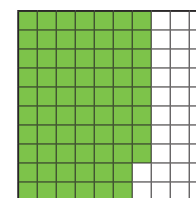
$$\frac{9}{10} = \frac{90}{100} = 0.9$$



$$\frac{10}{10} = \frac{100}{100} = 1$$



$$\frac{23}{100} = 0.23$$



$$\frac{68}{100} = 0.68$$

Decimals

Knowledge Organiser

Dividing by 10

Tens	Ones
8	5

 $\div 10$

Tens	Ones	Tenths
	8	5

Arrows indicate the movement of digits: 8 moves from Ones to Tenths ($\div 10$), and 5 moves from Tenths to Ones ($\div 10$).

Dividing by 100

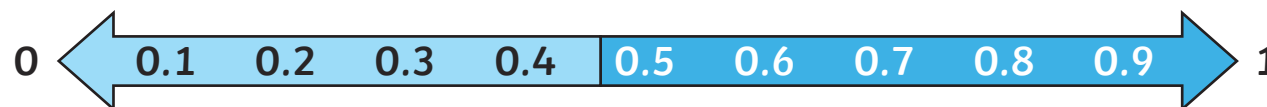
Tens	Ones
8	5

 $\div 100$

Tens	Ones	Tenths	Hundredths
	0	8	5

Arrows indicate the movement of digits: 8 moves from Ones to Hundredths ($\div 100$), and 5 moves from Tenths to Ones ($\div 100$).

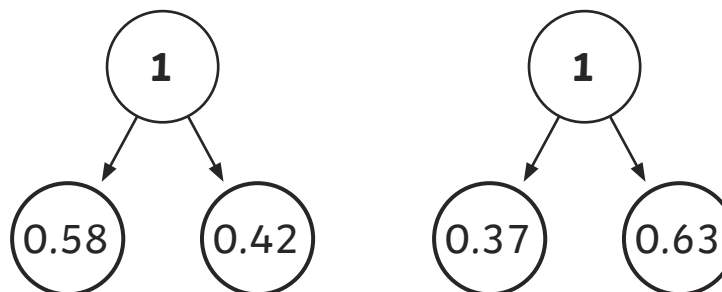
Rounding Decimals



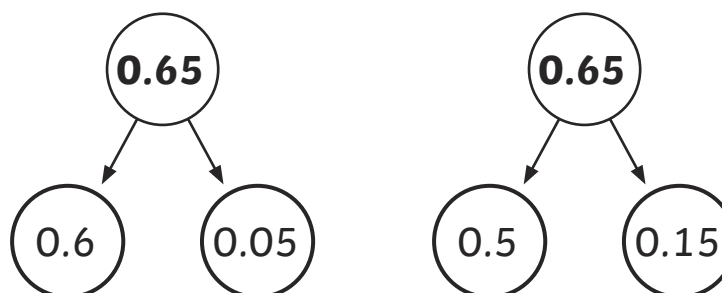
If the tenths digit is **1, 2, 3 or 4**, we round **down** to the nearest whole number.

If the tenths digit is **5, 6, 7, 8 or 9**, we round **up** to the nearest whole number.

Make a Whole



Partitioning Tenths and Hundredths



Comparing Numbers with Two Decimal Places

Ones	Tenths	Hundredths
0	3	4

Visual representation: 0.34 is shown with a decimal point, a 3 in the tenths place, and a 4 in the hundredths place. The tenths place is highlighted in yellow.

Ones	Tenths	Hundredths
1	0	2

Visual representation: 1.02 is shown with a decimal point, a 1 in the ones place, a 0 in the tenths place, and a 2 in the hundredths place. The ones place is highlighted in red.

Ones	Tenths	Hundredths
2	1	3

Visual representation: 2.13 is shown with a decimal point, a 2 in the ones place, a 1 in the tenths place, and a 3 in the hundredths place. The ones place is highlighted in red.