



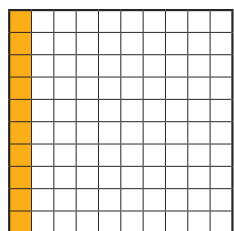


# Decimals

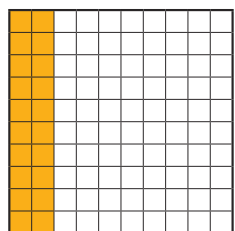
# Knowledge Organiser

Key Vocabulary	Tenths and Hundredths											
tenths	tenths	$\frac{0}{10}$	$\frac{1}{10}$	$\frac{2}{10}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$	$\frac{9}{10}$	$\frac{10}{10}$
hundredths												
decimal tenths		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
decimal hundredths												
decimal equivalents	hundredths	$\frac{0}{10}$	$\frac{1}{100}$	$\frac{2}{100}$	$\frac{3}{100}$	$\frac{4}{100}$	$\frac{5}{100}$	$\frac{6}{100}$	$\frac{7}{100}$	$\frac{8}{100}$	$\frac{9}{100}$	$\frac{1}{10}$
part-whole model												
rounding		0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1
decimal point												
place value	Tenth and Hundredth Decimal Equivalents											

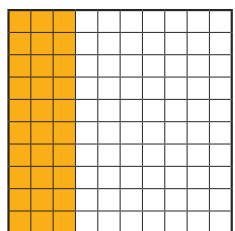
Fraction and Decimal Equivalents	
	$= \frac{1}{2} = 0.5$
	$= \frac{1}{4} = 0.25$
	$= \frac{3}{4} = 0.75$
	$= \frac{1}{10} = 0.1$



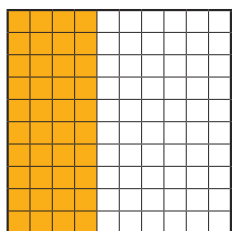
$$\frac{1}{10} = \frac{10}{100} = 0.1$$



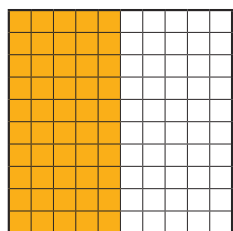
$$\frac{2}{10} = \frac{20}{100} = 0.2$$



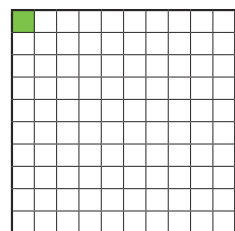
$$\frac{3}{10} = \frac{30}{100} = 0.3$$



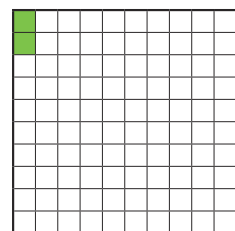
$$\frac{4}{10} = \frac{40}{100} = 0.4$$



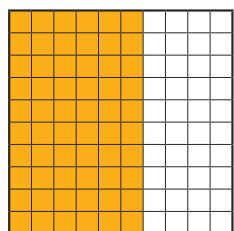
$$\frac{5}{10} = \frac{50}{100} = 0.5$$



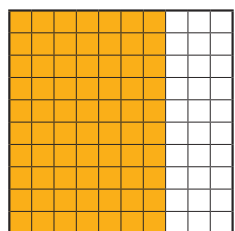
$$\frac{1}{100} = 0.01$$



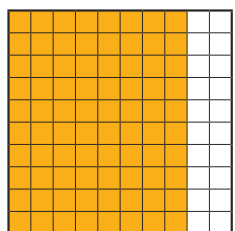
$$\frac{2}{100} = 0.02$$



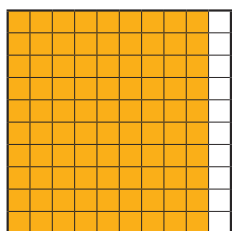
$$\frac{6}{10} = \frac{60}{100} = 0.6$$



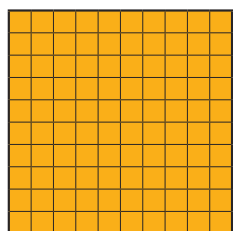
$$\frac{7}{10} = \frac{70}{100} = 0.7$$



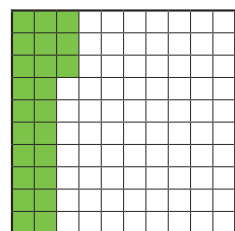
$$\frac{8}{10} = \frac{80}{100} = 0.8$$



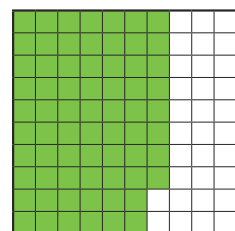
$$\frac{9}{10} = \frac{90}{100} = 0.9$$



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



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



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

# Decimals

# Knowledge Organiser

## Dividing by 10

Tens	Ones
8	5

 $\div 10$ 

Tens	Ones	tenths
	8	5

Arrows indicate the shift:  $\div 10$  from Tens to Ones, and  $\div 10$  from Ones to tenths.

## Dividing by 100

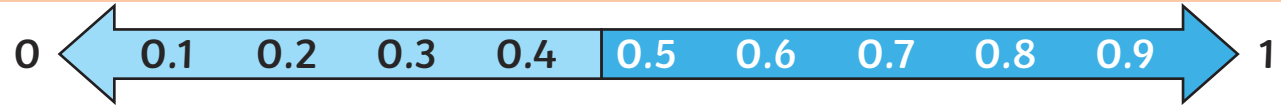
Tens	Ones
8	5

 $\div 100$ 

Tens	Ones	tenths	hundredths
	0	8	5

Arrows indicate the shift:  $\div 100$  from Tens to Ones, and  $\div 100$  from Ones to hundredths.

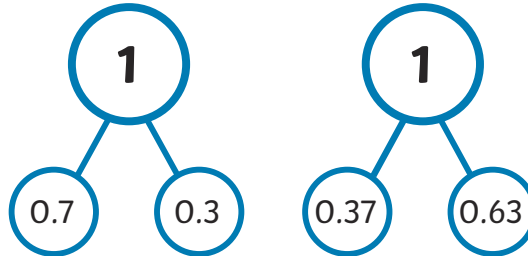
## Tenths and Hundredths



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.

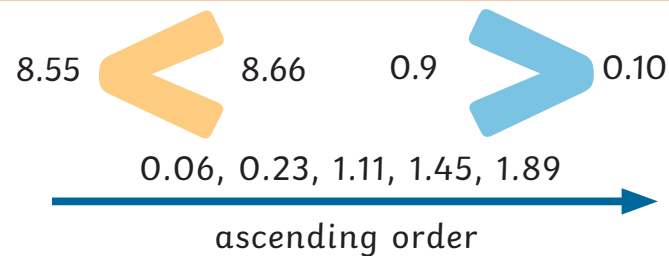
## Make a Whole



## Partitioning Tenths and Hundredths



## Comparing and Ordering Decimals



## Comparing Numbers with Two Decimal Places

Ones	tenths	hundredths
	0.1, 0.1, 0.1	0.01, 0.01, 0.01, 0.01

0 . 3 4

Ones	tenths	hundredths
1		0.01, 0.01

1 . 0 2

Ones	tenths	hundredths
1, 1	0.1	0.01, 0.01, 0.01

2 . 1 3