

# Decimals

# Knowledge Organiser

## Key Vocabulary

decimal place
decimal fraction
recurring decimal
equivalent fraction
tenth
sharing
partitioning
exchanging
rounding to 3d.p.
hundredth
thousandth
equal to
remainder
grouping

## Place Value

Tens	Ones	tenths	hundredths	thousandths
	● 1 ● 1 ● 1	● 0.1 ● 0.1 ● 0.1 ● 0.1	● 0.01 ● 0.01	● 0.001 ● 0.001 ● 0.001 ● 0.001 ● 0.001 ● 0.001



1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009

## Fractions to Decimals

$$\frac{7}{20} = \frac{35}{100} \text{ or } 0.35$$

$$\frac{7}{25} = \frac{28}{100} \text{ or } 0.28$$

$$\frac{7}{50} = \frac{14}{100} \text{ or } 0.14$$

$$\frac{8}{200} = \frac{4}{100} \text{ or } 0.04$$

When the denominator is not a factor or multiple of 100

$$\frac{7}{8} = 7 \div 8$$

	0	8	7	5
8	7	0	0	0

## Dividing Decimals by Integers

$$8.12 \div 4$$

	2	0	3
4	8	<del>1</del>	<sup>1</sup> 2

$$6.93 \div 3 = 2.31$$

Ones	tenths	hundredths
● 1 ● 1	● 0.1 ● 0.1 ● 0.1	● 0.01
● 1 ● 1	● 0.1 ● 0.1 ● 0.1	● 0.01
● 1 ● 1	● 0.1 ● 0.1 ● 0.1	● 0.01

