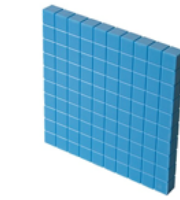
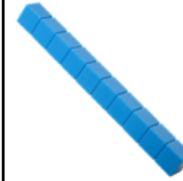


YEAR 5 Decimals and Percentages

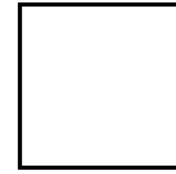
| Key Vocabulary | | |
|----------------|-------------|---------------|
| Fractions | Decimal | Percentage |
| Simplify | Equivalent | Tenths |
| Hundredths | Thousandths | Decimal place |



Hundreds



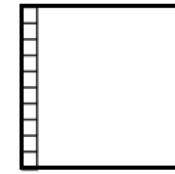
Tens



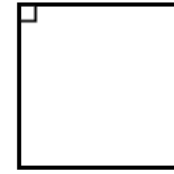
Ones



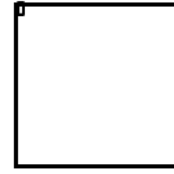
Decimal Point



tenths



hundredths



thousandths

Know simple FDP equivalents.

| | | |
|------------------------|-----------------------|------------------------|
| $\frac{1}{2}$ 0.5 50% | $\frac{2}{5}$ 0.4 40% | $\frac{5}{5}$ 1 100% |
| $\frac{1}{4}$ 0.25 25% | $\frac{3}{5}$ 0.6 60% | $\frac{1}{25}$ 0.04 4% |
| $\frac{1}{5}$ 0.2 20% | $\frac{4}{5}$ 0.8 80% | $\frac{3}{10}$ 0.3 30% |

Write percentages as a fraction with a denominator 100 and as a decimal

Remember that 'per cent' means 'out of 100'

$$75\% \longrightarrow \frac{75}{100} \longrightarrow 0.75$$

Round decimals to the nearest whole number and to 1 dp

Tips and tricks

Find your number and circle it.

Look next door.

Less than four, just ignore.

More than 4, add one more (to the circled number)

Replace the rest with zeroes

Read and write decimal numbers as fractions

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

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

$$\frac{1}{1000} = 0.001$$

1) Create the numerator. $0.15 \longrightarrow \frac{15}{100}$

2) Create the denominator.
2 digits after the decimal point
2 zeroes in the denominator

5) Simplify the fraction if needed $\frac{15}{100} = \frac{3}{20}$

Examples:

$0.5 = \frac{5}{10}$ (one zero) $0.72 = \frac{72}{100}$ (two zeroes) $0.638 = \frac{638}{1000}$ (three zeroes)

nearest whole nearest tenth (1dp)

$$\begin{array}{ccc} & \longleftarrow & 4.12 \\ \textcircled{4} & & \textcircled{1}2 \\ 4 & & 4.1 \end{array}$$

nearest whole nearest tenth (1dp)

$$\begin{array}{ccc} & \longleftarrow & 5.86 \\ \textcircled{5} & & \textcircled{8}6 \\ 6 & & 5.9 \end{array}$$