

YEAR 8 — PLACE VALUE AND PROPORTION... FDP equivalence

@whisto_maths

What do I need to be able to do?

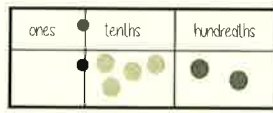
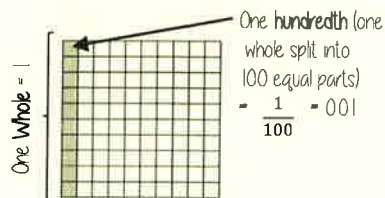
By the end of this unit you should be able to:

- Convert fluently between fractions, decimals & percentages

Keywords

- Fraction:** how many parts of a whole we have
- Decimal:** a number with a decimal point used to separate ones, tenths, hundredths etc
- Percentage:** a proportion of a whole represented as a number between 0 and 100
- Place value:** the numerical value that a digit has decided by its position in the number
- Placeholder:** a number that occupies a position to give value
- Interval:** a range between two numbers
- Tenth:** one whole split into 10 equal parts
- Hundredth:** one whole split into 100 equal parts
- Sector:** a part of a circle between two radius (often referred to as looking like a piece of pie)
- Recurring:** a decimal that repeats in a given pattern

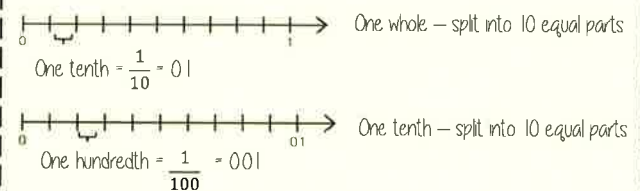
Tenths and hundredths



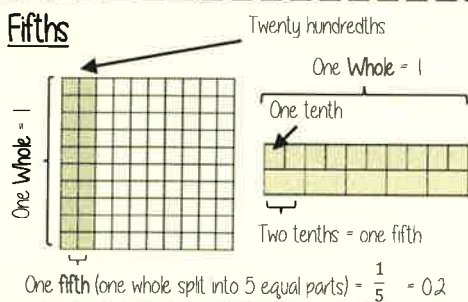
0 ones, 5 tenths and 2 hundredths
 $0 + 0.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.01 + 0.01$
 $= 0 + 0.5 + 0.02$
 $= 0.52$

One tenth (one whole split into 10 equal parts) = $\frac{1}{10} = 0.1$

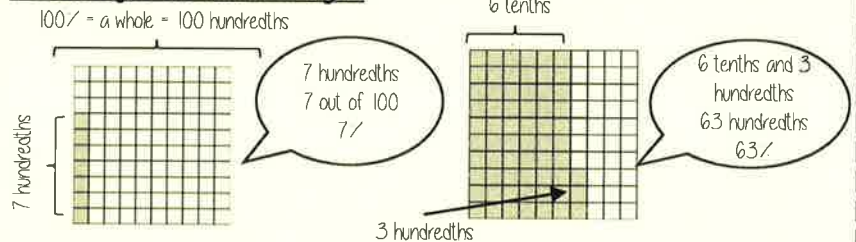
On a number line



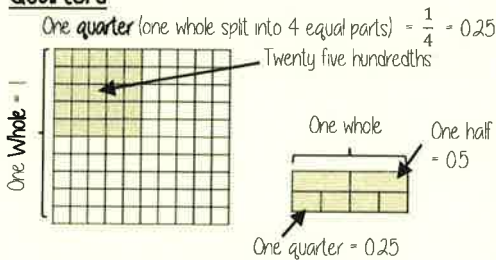
Fifths



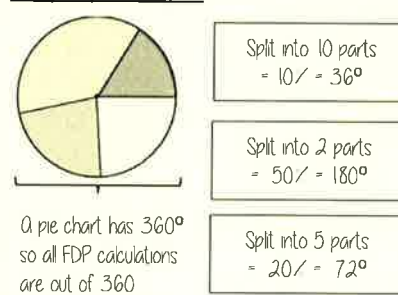
Percentages on a hundred grid



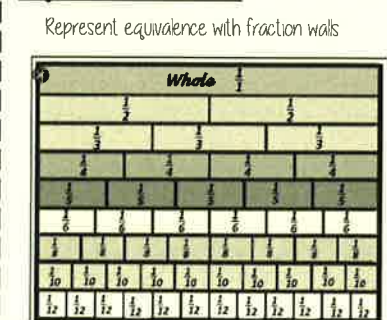
Quarters



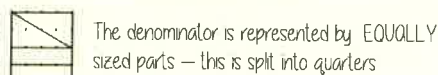
Simple pie charts



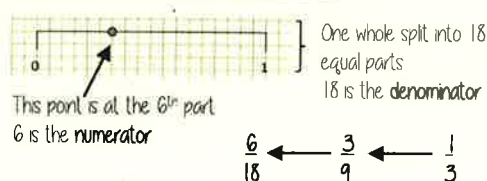
Equivalent fractions



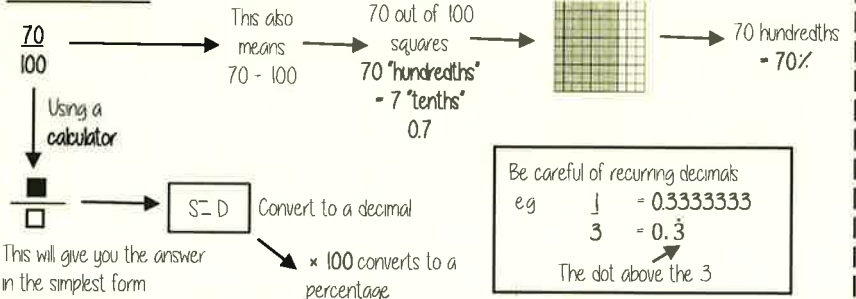
Fractions — on a diagram



Fractions — on a number line



Convert FDP



Be careful of recurring decimals
 e.g. $\frac{1}{3} = 0.333333$
 $\frac{3}{10} = 0.\dot{3}$
 The dot above the 3