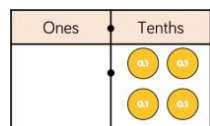# KIRF: I can convert between decimals, fractions and percentages.

6 - Autumn 2

Children should be able to convert between fractions, decimals and percentages and recall common decimal, fraction and percentage equivalences instantly.
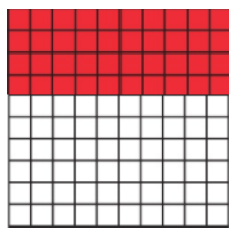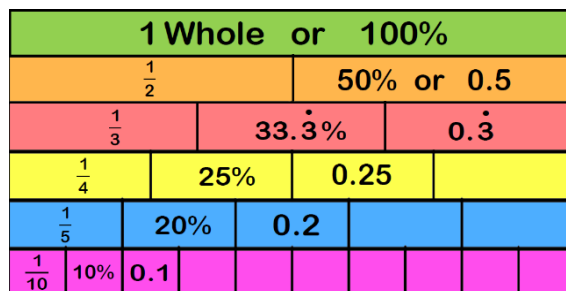
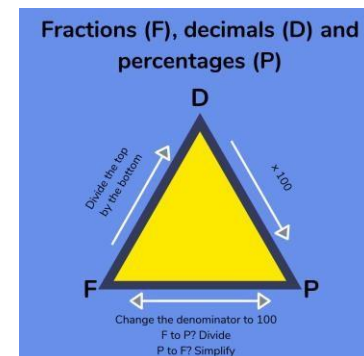## What can this look like?

Concrete:

Ones	Tenths

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

Pictorial:

1 Whole or 100%		
$\frac{1}{2}$	50% or 0.5	
$\frac{1}{3}$	33.3%	0.3
$\frac{1}{4}$	25%	0.25
$\frac{1}{5}$	20%	0.2
$\frac{1}{10}$	10%	0.1

Abstract:

Fractions (F), decimals (D) and percentages (P)

D — Divide the top by the bottom — ×100
F — P
Change the denominator to 100
F to P? Divide
P to F? Simplify

0.5	50%	$\frac{1}{2}$
0.25	25%	$\frac{1}{4}$
0.1	10%	$\frac{1}{10}$
0.01	1%	$\frac{1}{100}$
0.2	20%	$\frac{1}{5}$
0.75	75%	$\frac{3}{4}$

Questions to ask at home

What is 15% as a **fraction** and **decimal**? $\frac{3}{20}$ 0.15

Which is closer to 100%, $\frac{4}{5}$ or 0.5? How do you know? $\frac{4}{5} = 80\%$ 0.5 = 50% $\frac{4}{5}$ *is closest*

Complete the sentence- to **convert** a decimal to a percentage you … multiply by 100

Key vocabulary

Convert- To change the expression without changing the size or amount.

Decimal number- A number with a decimal point.

Fraction- A fraction represents the equal parts of the whole.

Per cent- Parts per 100. It shows the ratio 'out of 100'.

Things to try

Dominos- write the fraction, decimal and percentage the domino is showing

Pairs game- make your own fraction, decimal, percentage card matching game

FDP Poster- create a poster which explains how to convert between fractions, decimals and percentages

Let's go shopping- look out for percentages when out shopping. What is 25% as a decimal?

Websites:

https://www.mathplayground.com/percent04.html

https://mathsframe.co.uk/en/resources/resource/120/match_fractions_decimals_and_per centages#.UCdcd2MsCEY

https://whiterosemaths.com/homelearning/year-6/spring-week-3-number-percentages/