DECIMALS

KNOWLEDGE ORGANISER

1 2 3 4.5

Overview



Decimals we learn:

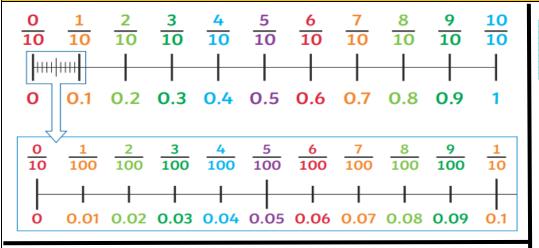
-Recognise tenths & hundredths. -Tenths hundredths as decimals -Tenths/ hundredths as decimals -Tenths/ hundredths on a place value grid -Divide 1 or 2 digits by 10/ 100 -Tenths/ hundredths on a number line

<u>Definition: Decimals</u> are a way of showing numbers that are not whole (a bit like fractions). Decimals are 'in between' whole numbers, e.g. 8.3 is in between 8 and 9.

This learning is important because...

it helps us to understand the parts that can make up a whole amount. This is needed in lots of areas of life (e.g. sharing, cooking, making).

Tenth and Hundredth Equivalency



One hundredth = 1/100 = 0.01

Two hundredths = 2/100 = 0.02

Three hundredth = 3/100 = 0.03

Four hundredths = 4/100 = 0.04

Five hundredths = 5/100 = 0.05

Six hundredths = 6/100 = 0.06

Seven hundredths = 7/100 = 0.07

Eight hundredths = 8/100 = 0.08

Nine hundredths = 9/100 = 0.09

Ten hundredths = One tenth = 10/100 = 0.1

ndred chart

One tenth = 1/10 = 0.1

Two tenths = 2/10 = 0.2

Three tenths = 3/10 = 0.3

Four tenths = 4/10 = 0.4

Five tenths = 5/10 = 0.5

Six tenths = 6/10 = 0.6

Seven tenths = 7/10 = 0.7

Eight tenths = 8/10 = 0.8

Nine tenths = 9/10 = 0.9

Ten tenths (1 whole) = 1

Decimals and Place Value

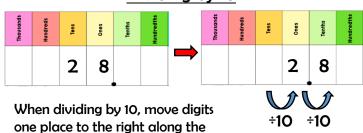
Place Value Chart



<u>Decimal point</u> – separates the whole number from the fractional part.

place value chart.

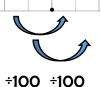
Dividing by 10



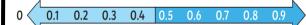
Dividing by 100



When dividing by 100, move digits two places to the right along the place value chart.



Rounding Decimals

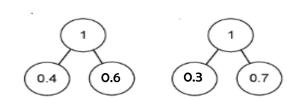


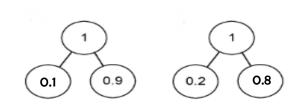
-If the tenths digit is 4 or below, we round down to the nearest whole number.

-If the tenths digit is 5 or above, we round up to the nearest whole number.

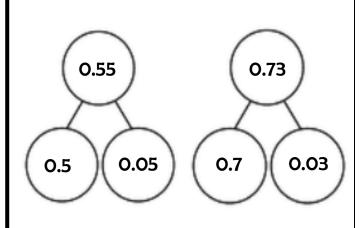
Partitioning One Whole/ Tenths and Hundredths

Partitioning One Whole





Partitioning into Tenths/ Hundredths



Key Vocabulary

Decimal Fraction Tenth Hundredth Part-Whole Model Rounding Decimal Point Equivalent Place Value