

Decimals & Percentages



Knowledge

- Decimals up to 2 d.p.
- Decimals as fractions
- Understand thousandths
- Thousandths as decimals
- Understand percentages
- Equivalent F.D.P

Skills

- Rounding decimals
- Order and compare decimals
- Percentages as fractions and decimals

Vocabulary

Whole, decimal place, decimal, tenths, hundredths, thousandths, add, subtract, multiply, divide, sequence

Inspirational Mathematician

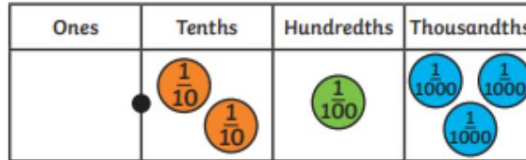
Terry Tao (1975-present)

Tao is arguably the greatest living mathematician, and has been called the greatest mathematician of his generation. Born in South Australia, Tao was a child prodigy, the youngest person ever to win a medal in the International Mathematical Olympiad - he was ten.

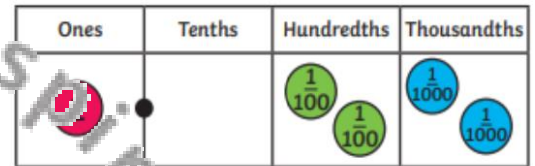


Compare and Order Decimals

Look at the left column then move into the columns on the right.



0 . 2 1 3

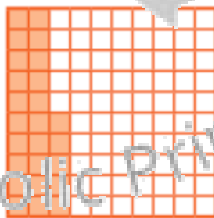


1 0 2 2

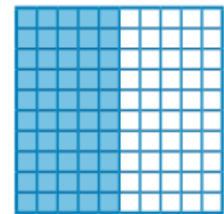
Decimals as Fractions

$$0.71 = \frac{71}{100} = \frac{7}{10} + \frac{1}{100} \quad 0.37 = \frac{37}{100} = \frac{3}{10} + \frac{7}{100}$$

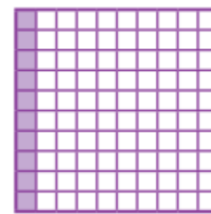
Equivalent Fractions, Decimals & Percentages



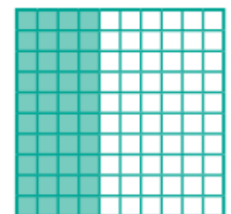
$$25\% = \frac{25}{100} = \frac{1}{4} = 0.25$$



$$50\% = \frac{50}{100} = \frac{1}{2} = 0.5$$



$$10\% = \frac{10}{100} = \frac{1}{10} = 0.1$$



$$40\% = \frac{40}{100} = \frac{2}{5} = 0.4$$

Rounding Decimals

$$5.24 \rightarrow 5.2$$

$$4.35 \rightarrow 4.00$$

Rule: Underline the digit and look in the next column. If it is 5 or above, add one more. If it is 5 or below, the digit stays the same. Everything after the digit is a zero.

Decimal Number Line



Decimal Place Value Grid

H	T	O	.	t	h	th
Hundreds	Tens	Ones		tenths	hundredths	thousandths