

Maths

Fractions

Maths | Year 6 | Fractions | Decimal Equivalents | Lesson 1 of 3: Decimal Equivalents

Decimal Equivalents

twinkl

Aim

• I can calculate decimal fraction equivalents.

Success Criteria

- I can write a fraction as a division calculation.
- I can recall quickly the decimal equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{10}$, $\frac{3}{4}$ and $\frac{1}{5}$.
- I can use the written method of short division to calculate a decimal equivalent.
- I can round a decimal equivalent to three decimal places if necessary.
- I can sort decimal equivalents correctly using Venn and Carroll diagrams.

Fraction

Click the button to spin th **Spinners** hexagons to generate a fraction at the place where the edges meet.

Perform the actions relating to the fraction created.

Spin to generate fraction

Stand up if it is greater than half.

Clap your hands if it can be simplified.



Fractions and



Fractions are another way of writing division.

 $= 4 \div 7$

Because of this, every fraction has a decimal number equivalent which we calculate by doing the division.

Fractions and



Some decimal number equivalents we can learn as facts:



Fractions and



However, some decimal purities equivalents need to be calculated:



Calculating a Decimal

When we want to calculate a decimal equivalent of a fraction, we use the written method of short division:



Calculating a Decimal

Have a go at using the written method of short division to find the decimal equivalent of this fraction:

If the digit after the thousandths is 4 or less, then the thousandths digit stays the same. If the digit after the thousandths is 5 or more, then the thousandths digit rounds up.

Step 1: Calculate 20 ÷ 7The multiple of 7 that comes immediately before 20 is
14, 14 = 2 × 7, so $20 \div 7 = 2$ remainder 6Step 2: Calculate 60 ÷ 7The multiple of 7 that comes immediately before 60 is
56, 56 = 8 × 7, so 56 ÷ 7 = 8 remainder 4Step 3: Calculate 40 ÷ 7The multiple of 7 that comes immediately before 40 is
35, 35 = 5 × 7, so 35 ÷ 7 = 5 remainder 5Step 3: Calculate 50 ÷ 7The multiple of 7 that comes immediately before 40 is
35, 35 = 5 × 7, so 35 ÷ 7 = 5 remainder 5Step 3: Calculate 50 ÷ 7The multiple of 7 that comes immediately before 50 is 49,
49 = 7 × 7, so the next digit after the thousandths is a 7.

Calculating a Decimal



Decimal



ooc

 $\frac{9}{10} =$

 $\frac{5}{6} =$

 $\frac{7}{10} =$



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Diving into Masterv

Dive in by completing your own activity!



Tarsia Domino



Match the edges of the triangles and squares together by calculating the decimal fraction equivalents.



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