



Maths

Calculation Policy

Fractions

2024

EYFS → page

Year One → page

Year Two → page

Year Three → page

Year Four → page

Year Five → page

Year Six → page

EYFS

0 ➡ I can say numbers in words in a sequence

Year One

0 ➡ I understand that fractions are equal parts of a whole

0 ➡ I know one half is one part of two equal parts of a whole

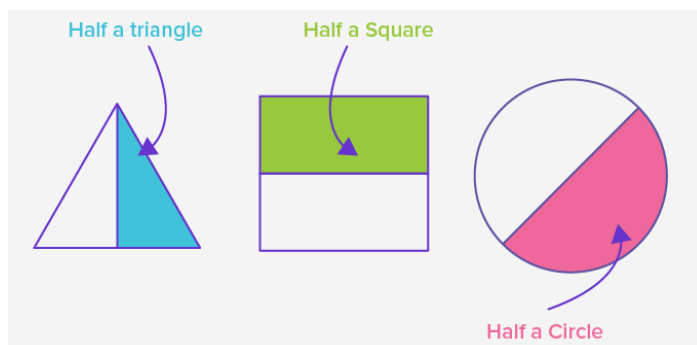
0 ➡ I know if the parts aren't equal, then it isn't a half

0 ➡ I can write the symbol for one half

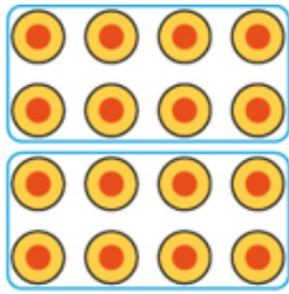
Add in Image 1

0 ➡ I can find one half of an object
(pizza, cake, box, table etc)

0 ➡ I can find one half of a shape



0 ➡ I can find one half of a quantity using concrete resources



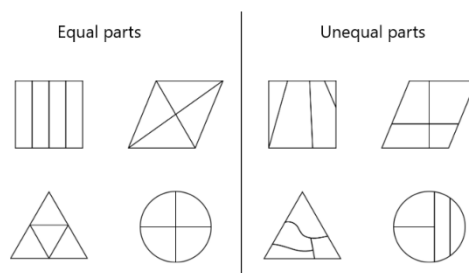
Any concrete resources can be used.

0 → I can write simple fractions (one half)

$$\frac{1}{2} \text{ of } 6 = 3$$

0 → I know one quarter is one part of four equal parts of a whole

0 → I know if the parts aren't equal, then it isn't a quarter



0 → I can write the symbol for one quarter

0 → I can find one quarter of an object
(pizza, cake, box, table etc)

0 → I can find one quarter of a shape

0 → I can find one quarter of a quantity using concrete resources

0 → I can write simple fractions (one quarter)

$$\frac{1}{4} \text{ of } 6 = 1.5$$

Year Two

0 → I know one third is one part of three equal parts of a whole

0 → I know if the parts aren't equal, then it isn't a third

0 ➡ I can write the symbol for one third

0 ➡ I can find one third of an object
(pizza, cake, box, table etc)

0 ➡ I can find one third of a shape

0 ➡ I can find one third of a quantity using concrete resources

0 ➡ I can write simple fractions (one third)

$$\frac{1}{2} \text{ of } 6 = 3$$

0 ➡ I know the unit fraction one quarter is one part of four equal groups

0 ➡ I know two quarters is two parts of four equal groups

0 ➡ I can write the symbol for two quarters

0 ➡ I can find two quarters of an object, shape and quantity using concrete resources

0 ➡ I can recognise the equivalence of one half and one quarter

0 ➡ I know three quarters is three parts of four equal groups

0 ➡ I can write the symbol for three quarters

0 ➡ I can find three quarters of an object, shape and quantity using concrete resources

Year Three

Recap of tenths from place value unit

0 ➡ I understand the meaning of the numerator and denominator

0 ➡ I know that the line in a fraction means divide

0 ➡ I understand that unit fractions are one part of the whole

0 ➡ I can order and compare unit fractions

0 ➡ I can place unit fractions on a numberline

- 0→ I can find a unit fraction of an amount using division facts
- 0→ I understand that non-unit fractions are more than one part of the whole
- 0→ I can order and compare non-unit fractions with the same denominator
- 0→ I can place non-unit fractions with the same denominator on a numberline
- 0→ I can find non-unit fractions of an amount using division facts
(small denominators → 2,5,10,3,4)
- 0→ I can recognise that one whole is equivalent to two halves, three thirds and four quarters
- 0→ I can use my multiples to identify how many parts are in a given whole
 $3 \times 5 = 15$ so there are 15 fifths in 3 wholes.
- 0→ I can find equivalent fractions using a bar model
- 0→ I can find equivalent fractions using my knowledge of multiplication
e.g → $2/5 = 4/10$
- 0→ I add fractions with the same denominator within a whole
- 0→ I subtract fractions with the same denominator within a whole
- 0→ I can solve problems that involve all of the above

Year Four:

- 0→ I understand the meaning of the numerator and denominator
- 0→ I know that the line in a fraction means divide
- 0→ I understand that unit fractions are one part of the whole
- 0→ I can find equivalent fractions using a bar model
- 0→ I can find equivalent fractions using my knowledge of multiplication
- 0→ I know that equivalent fractions are equal to one another
- 0→ I know common equivalent fractions
e.g → one half is equivalent to two quarters

- 0 ➡ I can find families of equivalent fractions
- 0 ➡ I know that the line in a fraction means divide
- 0 ➡ I can find a unit fraction of an amount using division facts
- 0 ➡ I understand that non-unit fractions are more than one part of the whole
- 0 ➡ I can find non-unit fractions of an amount using division facts
(For all timetables)
- 0 ➡ I add fractions with the same denominator within a whole
- 0 ➡ I subtract fractions with the same denominator within a whole
- 0 ➡ I add fractions with the same denominator within a whole
- 0 ➡ I subtract fractions with the same denominator within a whole

Recap of tenths and hundredths from place value unit

- 0 ➡ I know the decimal equivalence to a fraction when the denominator is 10
- 0 ➡ I know the decimal equivalence to a fraction when the denominator is 100
- 0 ➡ I know half of 100 is 50 and can apply this to finding decimal equivalence of $\frac{1}{2}$
- 0 ➡ I know one quarter of 100 is 25 and can apply this to finding decimal equivalence of $\frac{1}{4}$
- 0 ➡ I know three quarters of 100 is 75 and can apply this to finding decimal equivalence of $\frac{3}{4}$
- 0 ➡ I can solve simple measure and money word problems using the above

Recap of comparing and ordering tenths and hundredths from place value unit

- 0 ➡ I can identify the whole before and after a number with one decimal place
- 0 ➡ I can find the midpoint between two whole numbers

1. Number line

Find the midpoint between 11 and 12.



What's the difference between 11 and 12? 1

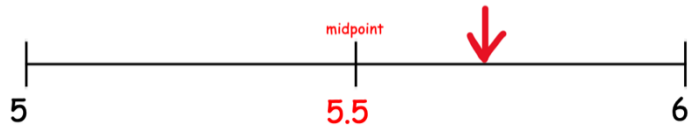
What would halfway be? $1 \div 2 = \frac{1}{2} = 0.5$

So, 0.5 more than 11 is 11.5

0 $\leftarrow$ I can place a number with one decimal place on a number line using the midpoint as a guide

1. Draw a number line
2. Find the whole before and after
3. Find the midpoint
4. Estimate where it would be

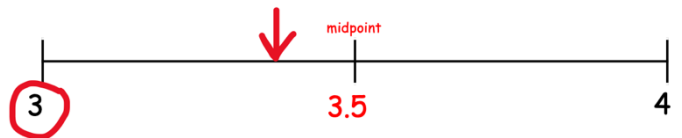
Place 5.7



0 I can round numbers with one decimal place to the nearest whole

1. Number line method:
 - a. Draw number line
 - b. Add the whole before and after
 - c. Find the midpoint
 - d. Place your number
 - e. Which whole is it closest to?

Round 3.4 to the nearest whole.



2. Rule:

- a. Underline the digit in the place value column you are rounding to (in this case, the ones because whole means no decimal places)

Round 3.4 to the nearest whole.

		3.	4	↓	Round down because it is 4				
		3							

- b. Circle the digit in the place value column to the right (in this case, the tenths)

- c. If the circled digit is 0, 1, 2, 3 or 4, round down to the previous multiple of 10 → the underlined digit stays the same and everything to the right becomes a 0 **HOWEVER, WHEN ROUNDING TO THE NEAREST WHOLE, WE DON'T PUT 0S AFTER THE ONES AS THE NUMBER WOULD NO LONGER BE WHOLE.**
- d. If the circled digit is 5, 6, 7, 8 or 9, round up to the next multiple of 10 → the underlined digit goes up by one and everything to the right becomes 0 **HOWEVER, WHEN ROUNDING TO THE NEAREST WHOLE, WE DON'T PUT 0S AFTER THE ONES AS THE NUMBER WOULD NO LONGER BE WHOLE.**

0→ I can solve simple measure and money word problems using the above

Year Five:

0→ I can find equivalent fractions using my knowledge of multiplication

0→ I can compare and order fractions whose denominators are all multiples of the same number

0→ I can compare and order fractions whose denominators are all factors of the same number

0→ I know that a proper fraction is less than 1

0→ I know that fractions can be greater than 1

0→ I know that an improper fraction has a larger numerator than denominator and represents where there are more parts than needed to make a whole

0→ I know that a mixed number represents a whole number and a fraction

0→ I can convert between an improper fraction and a mixed number using my knowledge of multiples of the denominator

0→ I compare mixed numbers and improper fractions

0→ I can add and subtract fractions with the same denominator (including improper fractions and mixed numbers)

0→ I can add and subtract fractions whose denominators are multiples of the same number (including improper fractions and mixed numbers)

0→ I can add and subtract fractions whose denominators are factors of the same number (including improper fractions and mixed numbers)

- 0→ I know to convert my answer from an improper fraction to a mixed number when adding and subtracting fractions
- 0→ I can multiply proper fractions by a whole number
- 0→ I can multiply mixed numbers by a whole number (converting the mixed number to an improper fraction)
- 0→ I know the decimal equivalence to a fraction when the denominator is 10
- 0→ I know the decimal equivalence to a fraction when the denominator is 100
- 0→ I know the decimal equivalence to a fraction when the denominator is 1,000

Recap of comparing and ordering decimals up to 3 d.p. from place value unit

- 0→ I can solve simple measure and money word problems using the above
- 0→ I can find the midpoint between two tenths

1. Number line

Find the midpoint between 11 and 12.



What's the difference between 11 and 12? 1

What would halfway be? $1 \div 2 = \frac{1}{2} = 0.5$

So, 0.5 more than 11 is 11.5

- 0→ I can find the midpoint between two hundredths

Use same method as previous

- 0→ I can place a number with one decimal place on a number line between two wholes using the midpoint

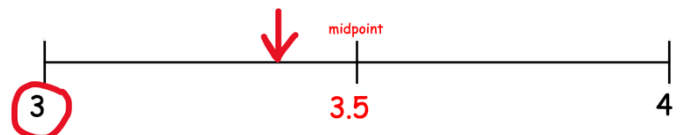
See previous year group

- 0→ I can place a number with two and three decimal places on a number line between two wholes using the midpoint

- ## Place 5.7

1. Number line method:
 - a. Draw number line
 - b. Add the whole before and after
 - c. Find the midpoint
 - d. Place your number
 - e. Which whole is it closest to?

Round 3.4 to the nearest whole.



- Round 3.4 to the nearest whole.

- 0 I can round numbers with two and three decimal places to 1 decimal place

-
- A horizontal number line with tick marks at 3.4, 3.45, and 3.5. The value 3.45 is labeled "midpoint" in red. A red arrow points down to the midpoint. The value 3.5 is circled in red.

- [illegible]

- 12

ARE ROUNDING TO AS THE ANSWER WOULD NO LONGER BE
1 DECIMAL PLACE (1 DIGIT AFTER THE DECIMAL POINT)

0 ➡ I can round numbers with three decimal places to 2 decimal places

Use same method as previous

0 ➡ I can solve simple measure and money word problems using the above

Year Six:

0 ➡ I can compare and order fractions whose denominators are all multiples of the same number

0 ➡ I can compare and order fractions whose denominators are all factors of the same number

0 ➡ I can compare and order mixed numbers and improper fractions

0 ➡ I can find equivalent fractions using my knowledge of multiplication

0 ➡ I can simplify fractions using common multiples

0 ➡ I can add and subtract fractions with the same denominator (including improper fractions and mixed numbers)

0 ➡ I can add and subtract fractions whose denominators are multiples of the same number (including improper fractions and mixed numbers)

0 ➡ I can add and subtract fractions whose denominators are factors of the same number (including improper fractions and mixed numbers)

0 ➡ I can add and subtract fractions with different denominators (including improper fractions and mixed numbers)

0 ➡ I know to convert my answer from an improper fraction to a mixed number when adding and subtracting fractions

0 ➡ I can multiply simple pairs of proper fractions

0 ➡ I know to simplify my answer when multiplying two proper fractions

0 ➡ I can divide proper fractions by whole numbers

Recap of decimals from place value unit

0→ I can work out decimal fraction equivalents using short division