Mereside
Church of England Primary Academy
Learn to Love, Love to Learn

Year: 6

Subject: Maths

Title:

# Fractions (A)

## What key knowledge do I need to have before this unit?

- Add and subtract fractions with the same denominator, e.g., 1/4 + 2/4 = 3/4.
- adding and subtracting fractions with different denominators, e.g., 1/3 + 2/5.
- Understand how to find a common denominator.

**Key outcomes:**

**What I need to know by the end of this unit of work:**

- Find equivalent fractions and simplify
- Find equivalent fractions on a number line
- Compare and order fractions.
- Add and subtract fractions with different denominators.
- Add and subtract mixed numbers
- Solve addition and subtraction multi-step problems in contexts.

National Curriculum Links:

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

Key Vocabulary and Definitions:

**Factors** – a number or quantity that when multiplied with another produces a given number.

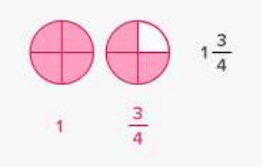
**Multiples** - numbers that result from multiplying one whole number by another whole number.

**Denominator –** The number below the fraction line that represents the total number of equal parts.

**Numerator –** The number above the fraction line that indicates the number of parts being considered.

**Simplify –** To reduce a fraction to its simplest form by dividing the numerator and denominator by their greatest common factor.

**Mixed number -** a number consisting of an integer and a proper fraction



# Fractions A

## Fractions: Recognise and write

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|
| • recognise, find and name a half as one of two equal parts of an object, shape or quantity<br>• recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | • recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity | • count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10<br>• recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators<br>• recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators | • count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. | • identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths<br>• recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] | |
| Summer 2 | Summer 1 | Spring 3 | Spring 4<br>Summer 1 | Autumn 4 | |

## Fractions: Compare

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|
| | • Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ | • recognise and show, using diagrams, equivalent fractions with small denominators<br>• compare and order unit fractions, and fractions with the same denominators | • recognise and show, using diagrams, families of common equivalent fractions | • compare and order fractions whose denominators are all multiples of the same number | • use common factors to simplify fractions; use common multiples to express fractions in the same denomination<br>• compare and order fractions, including fractions > 1 |
| | Summer 1 | Spring 3 | Spring 3 | Autumn 4 | Autumn 3 |

## Fractions: Solve problems

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|
| | | • solve problems that involve all of the above | • solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number | | |
| | | Spring 3<br>Summer 1 | Spring 3 | | |