



St Thomas' CE Primary School
Maths: Year 2 Fractions Chapter 13



Our Curriculum Intent

The National Curriculum for mathematics aims to ensure that all pupils become fluent, reason mathematically and can solve problems. We believe that a high- quality Mathematics education provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity about the subject.



Our Programme of Learning

Across the school we follow the Maths No Problem approach, we are committed to ensuring that every child develops an understanding and love of Maths. We prioritise the mastery of conceptual understanding through the use of real life/ everyday problems in every lesson. We aim for fluency in the fundamentals of Maths so that our pupils can recall and apply knowledge confidently and accurately to solve problems. We use open ended, challenging questions that enable our pupils to make connections, identify patterns and draw conclusions about Mathematics.

Structure of Our Maths Lessons:

Explore

Includes real life questions related to various lesson objectives as an introductory activity for pupils. Pupils work collaboratively to discuss and explore methods to solve the problem. They use concrete materials to support them and to help them represent their thinking. They discuss, reason and explain. In journals they record their ideas and are encouraged to describe methods and explain their thinking. As they progress through the school they evaluate more. These journals provide pupils with opportunities to show their understanding of the mathematical concepts learnt.

Master

This introduces new concepts through a Concrete, Pictorial, Abstract approach with the use of engaging pictures and manipulatives. Guided examples are provided for reinforcement. Teachers reinforce non-negotiable learning objectives through direct teaching

Guided Practice

This comprises of questions for further consolidation and for the immediate evaluation of pupils' learning. Children complete tasks either independently, with a peer or collectively as a class. Discussion follows to encourage reasoning and mathematical fluency to be shown.

Independent Practice-Workbooks

Pupils independently answer a range of questions directly related to the National Curriculum learning objective. These are arranged in a non- uniform way to allow for children to evidence their mastery of the mathematical concept being taught.

Overall aims: This is a large unit on fractions. It provides a review of previously learnt concepts and extends pupils to find fractions of whole numbers/quantities by the end of the unit. The unit begins by having pupils make equal parts, focusing on making halves, quarters and thirds. Then pupils learn to name fractions of the same denominations. After this, pupils learn about equal fractions, primarily looking at halves and quarters. They then move on to comparing and ordering fractions and counting wholes and parts. Pupils learn to count in halves, quarters and thirds, finishing the unit by finding parts of a set and part of a quantity.

NC maths objectives:

- 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.
- Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.
- Recognise and show, using diagrams, equivalent fractions with small denominators.
- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. Recognise and show, using diagrams, equivalent fractions with small denominators.

Lesson Overview *key lessons	Lesson Objective	Non-Negotiable
*Lesson 1 - Showing Equal Parts	To be able to recognise that fractions represent equal parts of a whole.	Pupils can identify a whole that has been divided into equal parts. Pupils can show that the same whole can be divided into a different number of equal parts.
*Lesson 2 - Showing Half and Quarter	To be able to recognise, find, name and write $\frac{1}{2}$ and $\frac{1}{4}$.	Pupils can identify one half and one quarter of simple objects such as a square. Pupils can read and write the fractions $\frac{1}{2}$ and $\frac{1}{4}$.
*Lesson 3 - Showing Quarters	To be able to recognise, find, name and write quarters.	Pupils can identify a shape that has $\frac{3}{4}$ of it shaded.
*Lesson 4 - Showing Thirds	To be able to recognise, find, name and write thirds.	Pupils can identify figures that have $\frac{1}{3}$ shaded. Pupils can write the thirds that have been shaded in a figure.
*Lesson 5 - Naming Fractions	To deepen the understanding of fraction notation.	Pupils can recognise the denominator as the number of equal parts of 1 whole. Pupils can recognise the numerator as the number of shaded parts.
*Lesson 6 - Making A Whole	To be able to recognise pairs of fractions that add up to a whole.	Pupils can use concrete materials and pictorial representation to complete fractions, making 1 whole.
Lesson 7 – Counting in Halves	To be able to recognise and write mixed numbers that are a multiple of $\frac{1}{2}$.	Pupils can write a mixed number involving halves from a pictorial representation.
Lesson 8 – Counting in Quarters	For advanced learners, ask if they are able to create a number line showing both halves and quarters for other pupils to use.	Pupils can write a mixed number involving quarters from a pictorial representation.
*Lesson 9 - Counting in Thirds	To be able to recognise and write mixed numbers that are a multiple of $\frac{1}{3}$.	Pupils can write a mixed number involving thirds from a pictorial representation
Lesson 10 – Finding Part of a Set	To be able to find half of a set.	Pupils can make 2 equal groups from a given number, when asked to find $\frac{1}{2}$ of that number, by using concrete materials, drawing or division.
Lesson 11 – Finding Part of a Set	To be able to find one third or two thirds of a set.	Pupils can make 3 equal groups from a given number when asked to find $\frac{1}{3}$ of that number using concrete materials, drawing or division.
Lesson 12 – Finding Part of a Set	To be able to find a fraction of a set where the denominator is 2, 3 or 4.	Pupils can make 4 equal groups from a given number when asked to find $\frac{1}{4}$ of that number using either concrete materials, drawing or division.
*Lesson 13 - Finding Part of a Quantity	To be able to recognise, name and find a fraction of a quantity.	Pupils can make equal groups from a given number when asked to find a fraction of that number, by using either concrete materials, drawing or division.

Spiral Curriculum Prior learning-	New learning to introduce:	Spiral Curriculum Future learning- What comes after?	Spiral Curriculum Future learning- What comes after?	Spiral Curriculum Future learning- What comes after?	Spiral Curriculum Future learning- What comes after?
Year 1: Fractions Show a half. Show a quarter. Group/share things to get a half or a quarter. Find a half or a quarter of a group of things	Year 2: Fractions Make and show halves, quarters and thirds. Name and write a fraction. Name fractions that make one whole. Compare and order fractions. Count wholes with halves, quarters and thirds. Find part of a set and a quantity	Year 3: Fractions Count in tenths. Make number pairs that form one whole. Add and subtract two fractions. Find and list equivalent fractions. Write a fraction in its simplest form. Compare fractions. Find part of a set and fraction of a number. Share a number equally. Write fractions on the number line. Write fractions that are greater than 1. Solve word problems involving fractions	Year 4: Fractions Count in hundredths. Write and show mixed numbers on a number line. Find equivalent fractions. Simplify fractions and mixed numbers. Add and subtract fractions. Solve word problems involving fractions.	Year 5: Fractions Find equivalent fractions of a given fraction. Recognise mixed numbers and improper fractions and convert from one form to the other. Compare and order fractions. Add and subtract fractions. Multiply proper fractions and mixed numbers by whole numbers.	Year 6: Fractions Find equivalent fractions using common multiples. Simplify fractions using common factors. Compare and order fractions. Add and subtract fractions. Multiply proper fractions. Divide proper fractions by whole numbers. Relate division of whole numbers to fractions and decimals.