

# Progression Document - National curriculum and 'Ready to Progress' mapping (EYFS – See NSM section)

Table 1 - National Curriculum Objectives

Table 2 - Ready To Progress Criteria

Table 3 - Small Steps

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum Objectives	recognise, find and name a half as 1 of 2 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	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
	recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity	write simple fractions, for example $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10	identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	compare and order fractions, including fractions > 1
			recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	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	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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$ ]	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
			recognise and show, using diagrams, equivalent fractions with small denominators	add and subtract fractions with the same denominator	add and subtract fractions with the same denominator, and denominators that are multiples of the same number	multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]
			add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ ]	recognise and write decimal equivalents of any number of tenths or hundreds	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$ ]
			compare and order unit fractions, and fractions with the same denominators	recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$	read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$ ]	associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$ ]
			associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$ ]	find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
			identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places	round decimals with 1 decimal place to the nearest whole number	round decimals with 2 decimal places to the nearest whole number and to 1 decimal place	multiply one-digit numbers with up to 2 decimal places by whole numbers
			solve problems that involve all of the above	compare numbers with the same number of decimal places up to 2 decimal places	read, write, order and compare numbers with up to 3 decimal places	use written division methods in cases where the answer has up to 2 decimal places
				solve simple measure and money problems involving fractions and decimals to 2 decimal places	solve problems involving number up to 3 decimal places	solve problems which require answers to be rounded to specified degrees of accuracy
					solve problems involving number up to 3 decimal places	recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
					recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction	
					solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{5}$ , $\frac{2}{5}$ , $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25	

	Ready to Progress Criteria	Block	Steps
Year 3	3F-1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.	Spr 3	<ul style="list-style-type: none"> <li>- Add and subtract fractions with the same denominator, within 1</li> <li>- Understand the numerators of non-unit fractions</li> <li>- Understand the whole</li> </ul>
	3F-2 Find unit fractions of quantities using known division facts (multiplication tables fluency).	Sum 1	<ul style="list-style-type: none"> <li>- Unit fractions of a set of objects</li> </ul>
	3F-3 Reason about the location of any fraction within 1 in the linear number system.	Spr 3	<ul style="list-style-type: none"> <li>- Compare and order unit fractions</li> <li>- Compare and order non-unit fractions</li> <li>- Fractions on a number line</li> <li>- Count in fractions on a number line</li> </ul>
	3F-4 Add and subtract fractions with the same denominator, within 1	Sum 1	<ul style="list-style-type: none"> <li>- Add fractions</li> <li>- Subtract fractions</li> </ul>
Year 4	4F-1 Reason about the location of mixed numbers in the linear number system.	Spr 3	<ul style="list-style-type: none"> <li>- Number lines with mixed numbers</li> <li>- Compare and order mixed numbers</li> </ul>
	4F-2 Convert mixed numbers to improper fractions and vice versa.	Spr 3	<ul style="list-style-type: none"> <li>- Convert mixed numbers to improper fractions</li> <li>- Convert improper fractions to mixed numbers</li> </ul>
	4F-3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	Spr 3	<ul style="list-style-type: none"> <li>- Add fractions and mixed numbers</li> <li>- Subtract from whole amounts</li> <li>- Subtract from mixed numbers</li> </ul>
Year 5	5F-1 Find non-unit fractions of quantities.	Spr 1	<ul style="list-style-type: none"> <li>- Calculate a fraction of a quantity</li> <li>- Fraction of an amount</li> </ul>
	5F-2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system	Aut 4	<ul style="list-style-type: none"> <li>- Find fractions equivalent to a unit fraction</li> <li>- Find fractions equivalent to a non-unit fraction</li> <li>- Recognise equivalent fractions</li> </ul>
	5F-3 Recall decimal fraction equivalents for $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{1}{5}$ , and $\frac{1}{10}$ and for multiples of these proper fractions.	Spr 3	<ul style="list-style-type: none"> <li>- Equivalent fractions and decimals (tenths)</li> <li>- Equivalent fractions and decimals (hundredths)</li> <li>- Equivalent fractions and decimals</li> </ul>
Year 6	6F-1 Recognise when fractions can be simplified, and use common factors to simplify fractions.	Aut 3	<ul style="list-style-type: none"> <li>- Equivalent fractions and simplifying</li> <li>- Equivalent fractions on a number line</li> </ul>
	6F-2 Express fractions in a common denomination and use this to compare fractions that are similar in value.	Aut 3	<ul style="list-style-type: none"> <li>- Compare and order (denominator)</li> </ul>
	6F-3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy	Aut 3	<ul style="list-style-type: none"> <li>- Compare and order (denominator)</li> <li>- Compare and order (numerator)</li> </ul>

## White Rose Maths National Curriculum Smaller Steps linked to Ready to Progress Criteria

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Recognise and Write	<b>Sum 1</b> <ul style="list-style-type: none"> <li>recognise, find and name a half as one of two equal parts of an object, shape or quantity</li> <li>recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</li> </ul>	<b>Sum 1</b> <ul style="list-style-type: none"> <li>recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>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</li> <li>recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</li> <li>recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</li> </ul>	<b>Spr 3 &amp; Sum 1</b> <ul style="list-style-type: none"> <li>count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> </ul>	<b>Aut 4</b> <ul style="list-style-type: none"> <li>identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</li> <li>recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number (for example, <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}</math>)</li> </ul>	
Compare		<b>Sum 1</b> <ul style="list-style-type: none"> <li>Recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>recognise and show, using diagrams, equivalent fractions with small denominators</li> <li>compare and order unit fractions, and fractions with the same denominators</li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>recognise and show, using diagrams, families of common equivalent fractions</li> </ul>	<b>Aut 4</b> <ul style="list-style-type: none"> <li>compare and order fractions whose denominators are all multiples of the same number</li> </ul>	<b>Aut 3</b> <ul style="list-style-type: none"> <li>use common factors to simplify fractions; use common multiples to express fractions in the same denomination</li> <li>compare and order fractions, including fractions <math>&gt; 1</math></li> </ul>
Calculations		<b>Sum 1</b> <ul style="list-style-type: none"> <li>write simple fractions for example, <math>\frac{1}{2}</math> of <math>6 = 3</math></li> </ul>	<b>Sum 1</b> <ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator within one whole (for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>)</li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator</li> </ul>	<b>Aut 4 &amp; Spr 2</b> <ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator and denominators that are multiples of the same number</li> <li>multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> </ul>	<b>Aut 3 &amp; Aut 4</b> <ul style="list-style-type: none"> <li>add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</li> <li>multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, <math>\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}</math>)</li> <li>divide proper fractions by whole numbers [for example <math>\frac{1}{3} \div 2 = \frac{1}{6}</math>]</li> </ul>
Solve Problems			<b>Spr 3 &amp; Sum 1</b> <ul style="list-style-type: none"> <li>solve problems that involve all of the above</li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

Decimals: Recognise, write, compare				<b>Spr 4 &amp; Sum 1</b> <ul style="list-style-type: none"> <li>recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math> and <math>\frac{3}{4}</math></li> <li>round decimals with one decimal place to the nearest whole number</li> <li>compare numbers with the same number of decimal places up to two decimal places</li> </ul>	<b>Spr 3 &amp; Sum 3</b> <ul style="list-style-type: none"> <li>read and write decimal numbers as fractions (for example, <math>0.71 = \frac{71}{100}</math>)</li> <li>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</li> <li>round decimals with two decimal places to the nearest whole number and to one decimal place</li> <li>read, write, order and compare numbers with up to three decimal places</li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>identify the value of each digit in numbers given to three decimal places</li> </ul>
Fractions, decimals and percentages				<b>Spr 3, Spr 4 &amp; Sum 1</b> <ul style="list-style-type: none"> <li>solve simple measure and money problems involving fractions and decimals to two decimal places</li> </ul>	<b>Spr 3</b> <ul style="list-style-type: none"> <li>recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</li> <li>solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25</li> </ul>	<b>Spr 3 &amp; Spr 4</b> <ul style="list-style-type: none"> <li>associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction (for example, <math>\frac{3}{8}</math>)</li> <li>recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</li> </ul>