



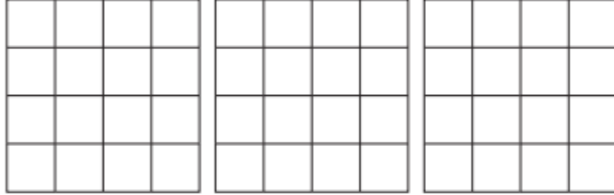
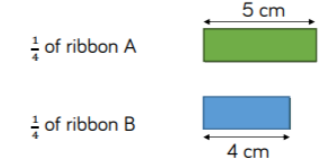

Year 2 – Fractions (Approximately 4 weeks)	
Objectives from Progression Document	recognise and find fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ write simple fractions, e.g. $\frac{1}{2}$ of 6 = 3
Previous Learning	recognise, find and name a half as one of two equal parts of an object, shape or quantity recognise, find and name a quarter as one of four equal parts of an object, shape or quantity recognise the equivalence of two halves and four quarters, using objects or shapes recognise that two halves, or four quarters, make a whole
Vocabulary	three quarters, one third, a third, equivalence, equivalent, unit fraction, non-unit fraction
Key fact(s)	Know: $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = 1$ whole; $\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$; $\frac{4}{4} = 1$ whole; $\frac{3}{3} =$ whole; $\frac{2}{2} = 1$ whole Know that $\frac{2}{4}$ and $\frac{1}{2}$ are the same (equivalent)
Number facts for fluency	Fluency Bee Stage 2: Odd and even Doubles to 20 (including the double-half relationship; subtract a number from its double; use the inverse)
Problem Solving and Reasoning Skills Objectives	describe and explain decisions and methods chosen suggest a way to solve a problem
Pre-assessment:	Year 1 fractions: recognise and name a half and a quarter; recognise that two halves or four quarters make a whole

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Sequence of Learning						
White Rose Small Steps	Learning Intention	Key Questions	Sentence Stems	Problem-solving links	Comments	Extension and Greater Depth Opportunities
Make Equal Parts	To recognise and make equal parts of a whole	What is the whole? What are the parts? How many parts is the object/quantity split into? Are the parts equal? How do you know? Do equal parts always look the same? Is there more than one way to split the object/quantity into equal parts?	I have ___ equal parts I know the parts are equal because... I know the parts are not equal because...		Children understand the concept of a whole as being one object or one quantity. Children explore making and recognising equal and unequal parts	Three children are splitting a square into equal parts. Teddy Alex Mo Who has split the square into equal parts? Explain why.
Recognise a Half	To recognise a half is one part of two equal parts	How many equal parts has the shape/object/length been split into? What fraction is this part worth? In the notation 1/2, what does the 1 represent? What does the 2 represent?	The whole has been split into ___ equal parts. Each part is worth ___ I can write ___ as ___/___		Children are introduced to the notation of 1/2 for the first time. Children may have misconceptions about what this means/represents. Introduce language of numerator and denominator.	How many different ways can you put these beanbags into equal groups?
Find a Half	To find a half a shape, quantity or number	How did you halve the sweets? What is the value of the whole? What is the value of half of the whole? What do you notice? What do you notice about your answers? How can you use your answer to a half of 4 to help you work out a half of 40?	The whole is ___ I have split the whole into ___ equal parts Half of ___ is ___	Opportunities to find half of monetary amounts, e.g. A shop has halved its prices...find the new prices.	Links should be made to dividing by 2. Children will need to physically share between two groups initially.	Odd One Out 1 2 One half I am thinking of a number. Half of my number is more than 10 but less than 15. What could my number be?
Recognise a quarter	To recognise a quarter is one part of four equal parts	How many equal parts have you split the whole into if you have split it into quarters? In 1/4 what does the 1 represent? What does the 4 represent? Can you shade one quarter in different ways? How do you know that you have shaded one quarter? How many quarters make a whole?	The whole has been split into ___ equal parts. Each part is worth ___ I can write ___ as ___/___ I will shade ___ part because....		Children should build on their knowledge of halves and what this means to understand what a quarter is. Introduce the idea that a quarter is a half of a half (pictorially).	Which is the odd one out? Explain your answer. True or False? 1/4 of the shape is shaded.
Find a quarter	To find a quarter of a shape, quantity or number	What is the whole? What is a half? What is a quarter? Can you circle a quarter in a different way? How do you know you have found 1/4? What do you notice about half of 12 and one quarter of 12? Can you explain what has happened?	The whole is ___ I have split the whole into ___ equal parts Quarter of ___ is ___	Nrich: A bowl of fruit	They begin by physically sharing amounts into four equal groups, or drawing around quantities then move towards working in the abstract. The link between the concrete, pictorial and abstract representations should be made explicit. Support children in seeing the relationship between half and a quarter of an amount.	Take 12 counters. a) Show that you can make 2 equal groups. b) Show that you cannot make 5 equal groups. What other equal groups can you make?
Recognise a third	To recognise a third is one part of three equal parts	How many equal parts have you split the whole in to if you have split it into thirds? In 1/3 what does the digit 1 represent? What does the digit 3 represent? Can you shade 1/3 in a different way? How do you know that you have shaded 1/3? How many thirds make a whole?	The whole has been split into ___ equal parts. Each part is worth ___ I can write ___ as ___/___ I will shade ___ part because....		Continue to use the language of whole, parts, denominator and numerator. Can children begin to use their knowledge of 1/2 and 1/4 notation to work out 1/3?	
Find a Third	To find a third of a shape,	How many objects make the whole? Can we split the whole amount into three equal groups? What is a third of ___?	There are ___ cubes altogether The whole is ___ I have split the whole into ___ equal parts		Children should use their knowledge of division and previous fractions to find a 1/3. Ensure children have the opportunity to find a 1/3 of shapes, quantities and numbers.	Explain your answer.



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	quantity or number	What is staying the same? What is changing? How does changing the whole amount change the answer? Is the answer still worth a third? Explain why?	A third of ___ is ____			Colour in $\frac{1}{4}$ of each of these grids in a different way. Try to think of an unusual way.
Unit Fractions	To recognise and identify unit fractions.	How can we represent these unit fractions in different ways? Why do we call them a unit fraction? Where can we see the unit? Show me $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ of the model/counters etc. What is the same? What is different? Which unit fraction is bigger/smaller if the whole is the same?	The numerator is ____ The denominator is ____ I know it is a unit fraction because... ____ is a unit fraction because...	Nrich: Making longer, making shorter	Introduce the idea of a unit fraction being one part of a whole. Use as an opportunity for children to find a range of fractions e.g. $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{2}$	 <p>How many squares did you colour each time?</p>
Non-unit fractions	To recognise and identify non unit fractions	How many quarters make a whole? How many thirds make a whole? What do you notice? How many quarters are there in $\frac{3}{4}$? In $\frac{3}{4}$ what does the digit 3 represent? What does the digit 4 represent? Give me an example of a unit fraction and a non-unit fraction.	In $\frac{2}{4}$ the 2 represents... In $\frac{3}{4}$ the 3 represents... An example of a non-unit fraction is...		Build on children's knowledge of numerators to introduce $\frac{2}{3}$ and $\frac{3}{4}$. Can children use their knowledge to identify and recognise non-unit fractions?	<p>Mo has two ribbons. He cuts $\frac{1}{4}$ from each ribbon.</p>  <p>Ron is thinking of a number. </p>
Equivalence of $\frac{1}{2}$ and $\frac{2}{4}$	To understand that one half is the same as two quarters	What does equivalent mean? What symbol do we use? Are these two fractions equal? (half and two quarters) Are the numerators the same? Are the denominators the same? How many quarters are equivalent to a half?	A ____ and ____ are ____ A half is equivalent to a ____ Two quarters is equivalent to a ____.		Children will not know what equivalence means – explicitly teach this vocabulary. Give children time to explore practically.	<p>How long were Mo's whole pieces of ribbon? Which ribbon was the longest? How much longer?</p> <p>One third of his number is greater than 8 but smaller than 12. What could his number be?</p>
Find three quarters	To find $\frac{3}{4}$ of a shape, quantity or number	How many quarters make a whole? Can you represent this in a bar model? How many equal parts is $\frac{3}{4}$? Can you spot any patterns? What has stayed the same? What has changed? What do you notice?	The numerator is ____ The denominator is ____ One quarter of ____ is ____ Two quarters of ____ is ____ Three quarters of ____ is ____ Four quarters of ____ is ____		Children should be confident in finding a quarter before this step. Ensure misconceptions are addressed. Use their knowledge of finding one quarter to then find three quarters.	<p>I am thinking of a number.</p> <p>?</p> <p>One third of my number is 12</p>
Count in fractions	To count in unit fractions	Which number are you starting on? How many parts are there in your fraction whole? Which fraction will come next? What patterns can you spot? Continue the pattern: $\frac{1}{3}$, $\frac{2}{3}$, 1, $1\frac{1}{3}$, $1\frac{2}{3}$, 2, $2\frac{1}{3}$, $2\frac{2}{3}$...	The numerator tells me... The denominator tells me... $\frac{2}{2}$ is the same as ____	Explore completing sequences in fractions	This is a non-statutory note/guidance. Only complete if children are very confident with their fraction knowledge. Use counting sticks and number lines to model.	<p>Which will be greater, one half of my number or one quarter of my number? Use cubes or a bar model to prove your answer.</p>
Post-assessment:		WRH end of block fractions assessment – snip as feel appropriate Previous fraction SATs questions – snip as feel appropriate				

Sort the fractions into the table.

	Fractions equal to one whole	Fractions less than one whole
Unit fractions		
Non-unit fractions		

$\frac{3}{4}$ $\frac{2}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{2}{3}$ $\frac{4}{4}$ $\frac{3}{3}$ $\frac{1}{2}$

What do you notice?

Are there any boxes in the table empty?

What fraction could you write here?