Old Town Infant School and Nursery

MATHS MEDIUM TERM PLANNING

Coastal Learning PARTNERSHIP

Year 2 – Fractions (Approximately 4 weeks)	
Objectives from Progression Document	**recognise and find fractions $^1/_3$, $^1/_4$, $^2/_4$ and $^3/_4$ of a length, shape, set of objects or quantity** **name and write fractions $^1/_3$, $^1/_4$, $^2/_4$ and $^3/_4$ of a length, shape, set of objects or quantity** **recognise the equivalence of $^2/_4$ and $^1/_2$** **write simple fractions, e.g. $^1/_2$ 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 2/4 and 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. How many different ways can you put these beanbags into equal groups?
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 ½ for the first time. Children may have misconceptions about what this means/represents. Introduce language of numerator and denominator.	
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 Which is the odd one out? Explain your answer. 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 ¼ 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).	
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 ¼? 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.	True or False? $\frac{1}{4}$ of the shape is shaded. Explain your answer.
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 ½ and ¼ notation to work out 1/3?	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?
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.	

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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 ____		
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 ½, 1/3, ¼ 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. 1/3, ¼ and ½
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 ¾? In ¾ 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 2/4 the 2 represents…. In ¾ the 3 represents…. An example of a non-unit fraction is…		Build on children's knowledge of numerators to introduce 2/3 and 3/4. Can children use their knowledge to identify and recognise non-unit fractions?
Equivalence of ½ and 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.
Find three quarters	**To find ¾ 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 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.
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: 1/3, 2/3, 1, 1 1/3, 1 2/3, 2, 2 1/3, 2 2/3…	The numerator tells me…. The denominator tells me… 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.
Post-assessment:	WRH end of block fractions assessment – snip as feel appropriate Previous fraction SATs questions – snip as feel appropriate