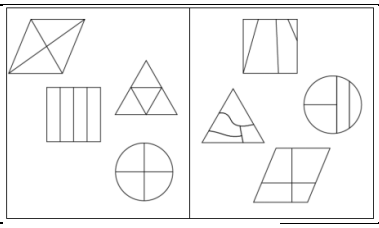
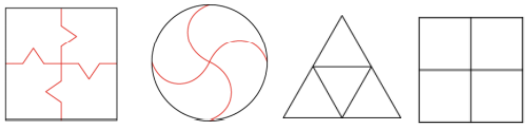
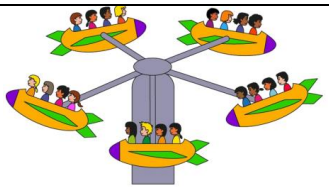
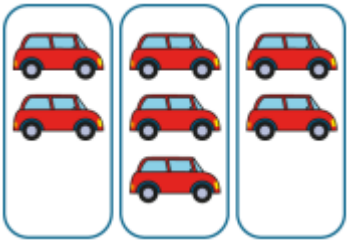
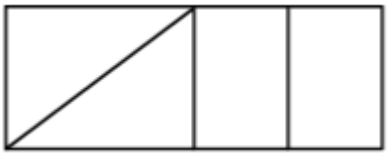
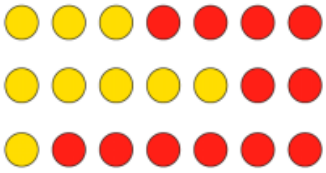
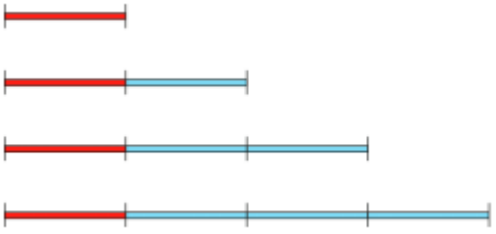
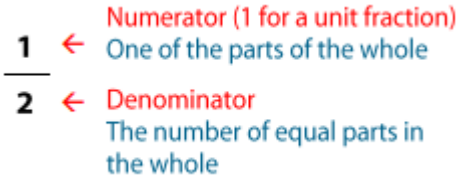
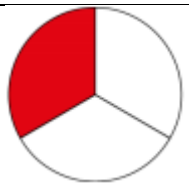
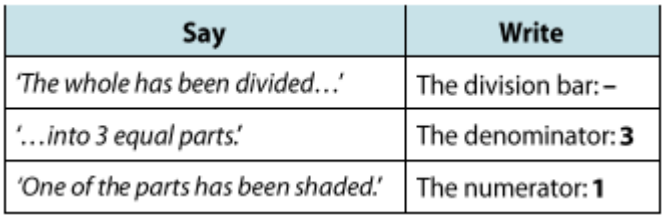
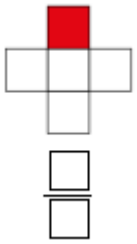
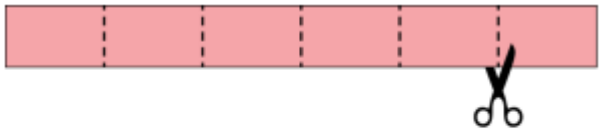
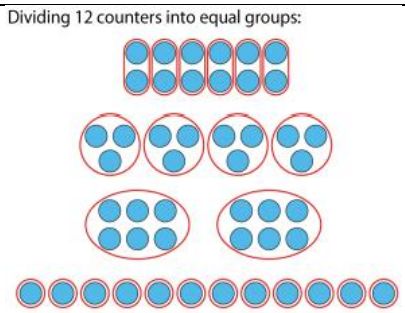
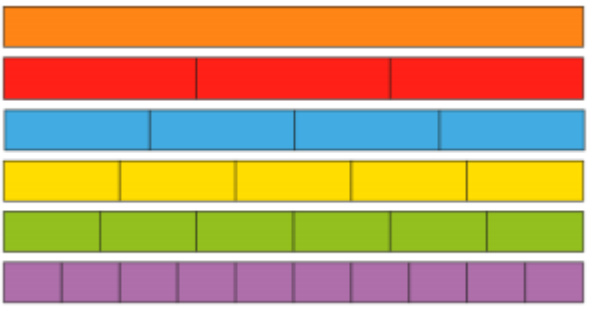
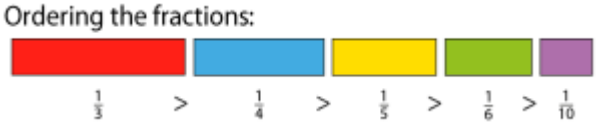
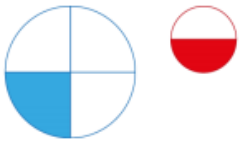
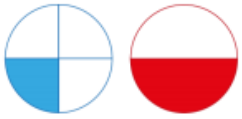
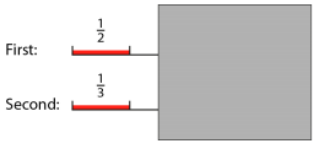
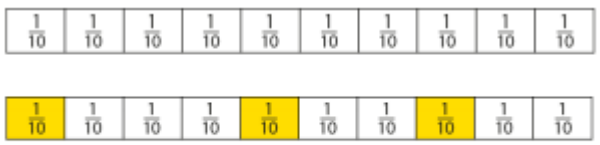
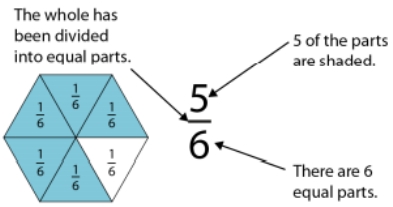
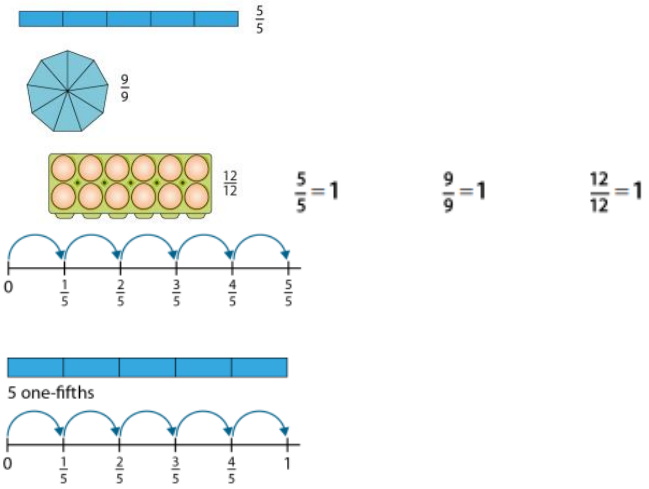
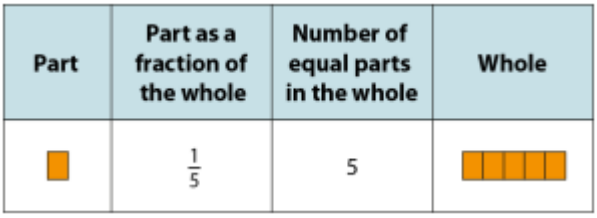
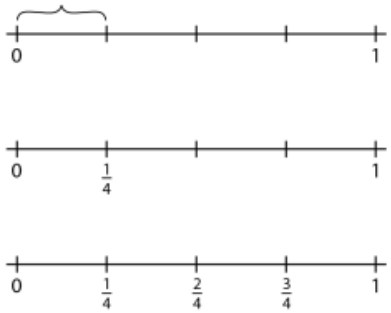
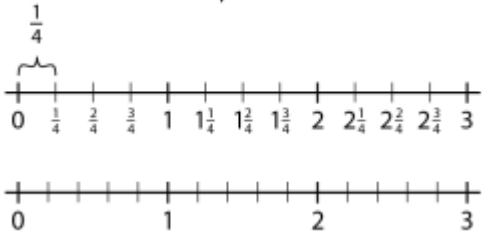
Stem Sentences. Spine 3: Fractions

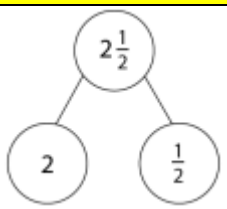
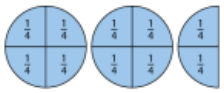
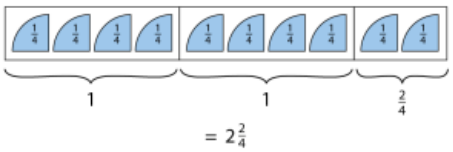
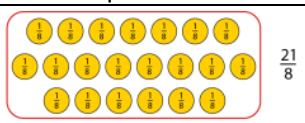
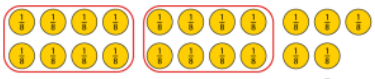
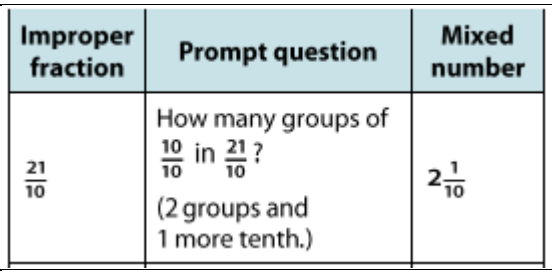
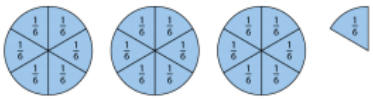
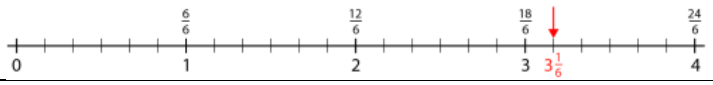
	Part-Whole relationships		
PD Link	**Example of stem sentence**	**Type of stem sentence**	**Examples from the NCETM PD Materials**
Year 3: 3.1 **1:1** **1:4**	If _____ is the whole then _____ is part of the whole.	Structure	 If Europe is the whole , then the United Kingdon is part of the whole. Mon Tue Wed Thu Fri Sat Sun If the week is the while then Tuesday is part of the whole
Year 3: 3.1 **1:5**	**A part is always smaller than the whole.**	**Generalisation**	
Year 3: 3.1 **1:7**	If _____ is the whole then _____ is **not** part of the whole.	Structure	If my face is the whole then my foot is not part of the whole.
Year 3: 3.1 **2:2**	The whole has been divided into ___ equal / unequal parts.	Structure / language	
Year 3: 3.1 **2:3**	The whole has been divided into ___ equal parts.	Structure	 The whole has been divided into 4 equal parts.

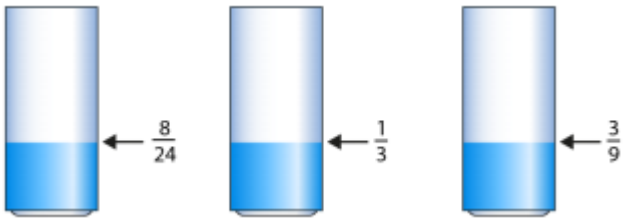
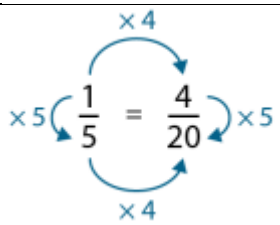
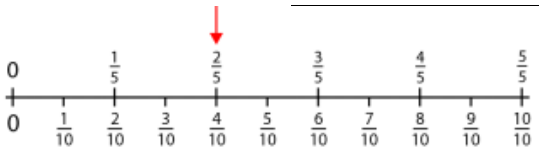
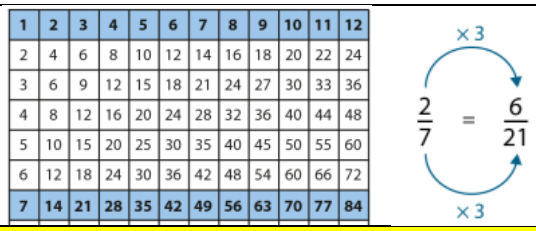
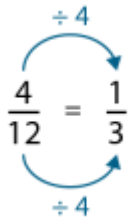
Year 3: 3.1 **2:6**	The parts are **equal**, I know this because the number of ___ in each part is **the same**.	Structure	
Year 3: 3.1 **2:6**	The parts are **unequal**, I know this because the number of ____ in each part is **not the same**.	Structure / language	
Year 3: 3.1 **2:7**	**Equal-sized parts do not have to look the same.**	**Generalisation**	
Year 3: 3.1 **3:2**	**Different parts of the same-sized whole can be directly compared based on their size.**	**Generalisation**	 In the first set of counters, the yellow counters make up a smaller part of the whole then in the second set.
Year 3: 3.1 **3:4**	**As the while increases in size and the size of the selected part remains the same, each part becomes smaller in relation to the whole.**	**Generalisation**	
	Unit Fractions		
Year 3 3:2 **2:1**	**A unit fraction is any fraction where the numerator is one.**	**Generalisation**	
Year 3: 3.2 **2:1**	The whole has been divided into ___ equal parts ___ of the parts has been shaded.	Structure / language	 The whole has been divided into three equal parts. One pf the parts has been shaded.
Year 3: 3.2 **2:2**		Language / structure	

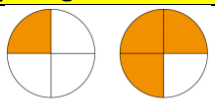
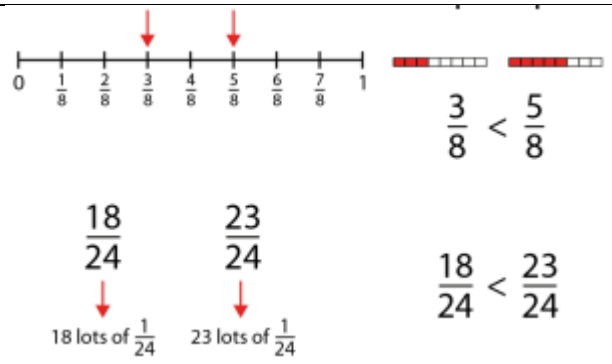
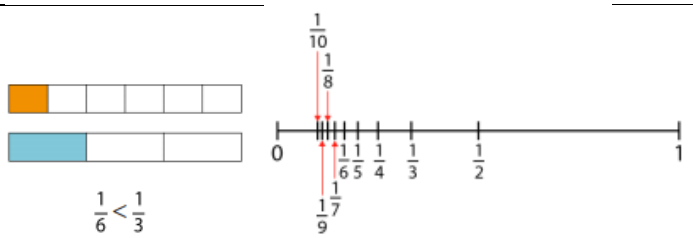
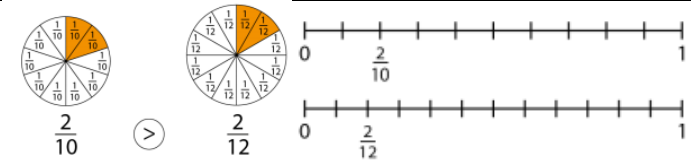
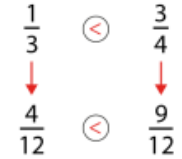
Year 3: 3.2 **2:2**	The denominator is ___ because the whole is divided into ___ equal parts. The numerator is one because one part is shaded.	Structure	 The denominaor is 4 because the whole is divided into 4 equal parts. The numerator is 1 because one part is shaded.
Year 3: 3.2 **3:1**	The whole has been divided into __ equal parts. Each part is one ___ of the whole. ___ of the whole ribbon has been cut off.	Structure	 • *'The whole has been divided into six equal parts.'* • *'Each equal part is one-sixth of the whole.'* • *'One-sixth of the whole ribbon has been cut off.'*
Year 3: 3.2 **3:2**	The whole has been divided into __ equal parts. One of these parts is highlighted. This part is one ___ of the whole line.	Structure	 The whole has been divided into 5 equal parts. One of these parts is highlighted. This part is one fifth of the whole line.
Year 3: 3.2 **3:6**	The whole has been divided into ___ equal parts. One of these parts in one ___ of the whole.	Structure	
Year 3: 3.2 **5:1**	**When the whole is the same, the greater the number of equal parts, the smaller each equal part is.** **When the whole is the same, the smaller the number of equal parts, the bigger each equal part is.**	**Generalisation**	
Year 3: 3.2 **5:1**	**When comparing unit fractions, the greater the denominator, the smaller the fraction.**	**Generalisation**	

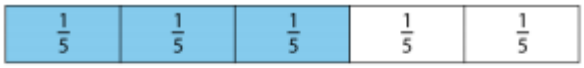
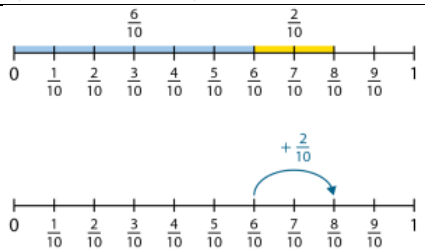
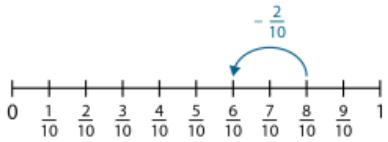
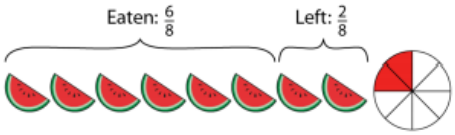
Year 3: 3.2 **5:4**	**When we compare fractions, the whole has to be the same.**	**Generalisation**	*'Emma looks at these two diagrams. She says that they prove that $\frac{1}{4} > \frac{1}{2}$. Do you agree or disagree?'*  • *'Disagree: to compare fractions, the wholes must the same.'* 
Year 3: 3.2 **6:4**	If one ____ is a part, then the whole is __ times as much. Take ___ parts and put them together to make a whole.	Structure	 First: *'If one-half is a part, then the whole is two times as much. Take two parts and put them together to make one whole.'* Second: *'If one-third is a part, then the whole is three times as much. Take three parts and put them together to make one whole.'* 
	Non- Unit Fractions		
Year 3: 3.3 **1:4**	I have ____ one tenths. I have ___ tenths.	Structure / language	 • *'I have three one-tenths. I have three-tenths.'*
Year 3: 3.3 **1.6**	There are ___ equal parts in the whole. There are __ parts shaded. ___ is shaded.	Structure / language	 *'There are five equal parts in the whole.'* • *'There are four parts shaded.'* • *'Four-fifths is shaded.'*
Year 3: 3.3 **2:1**	The whole has been divided into ___ equal parts. ___ of the parts are shaded. That is _____ of the whole.	Structure / language	 • *'The whole has been divided into six equal parts.'* • *'Five of the parts are shaded.'* • *'That is five-sixths of the whole.'*
Year 3: 3.3 **2:5**	The whole has been divided into ____ equal parts. ___ of the parts have been shaded; that is ___ of the whole.	Structure / language	 The whole has been divided into 7 equal parts. 5 of the parts have been shaded; that is 5/7 of the whole.

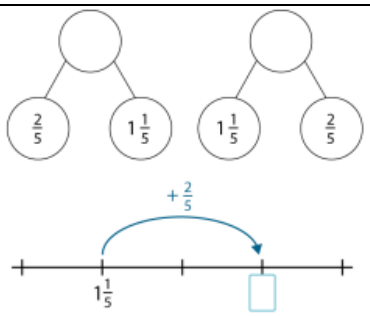
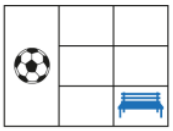
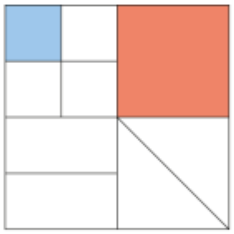
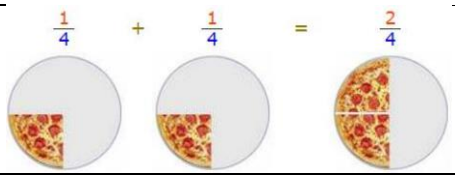
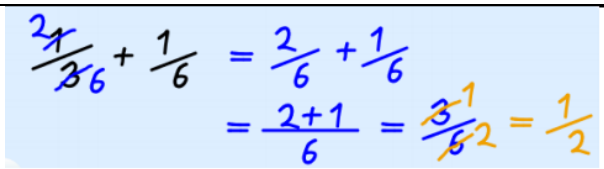
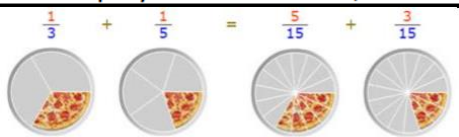
Year 3: 3.3 **2:7**	The denominator is ___ because the whole has been divided into ___ equal parts. The numerator is ___ because ___ of the parts have been identified.	Structure / language	 The denominator is 5 because the whole has been divided into 5 equal parts. The numerator is 3 because 3 of the parts have been identified.
	Making a whole		
Year 3: 3.3 **3:3** **6:1**	**When the numerator and the denominator are the same the fraction is equivalent to one whole.**	**Generalisation**	
Year 4: 3.6 **5:1**	**If we know the size of a unit fraction, we can work out the size of the whole.**	**Generalisation**	
Year 4: 3.6 **5:11**	**Divide by the numerator to find one part. Multiply the denominator to find the whole.**	**Generalisation**	*'$\frac{2}{3}$ of the number is 8.'* *'$\frac{1}{3}$ of the number is 4.'* 8 ÷ 2 = 4 *'$\frac{3}{3}$ of the number is 12.'* 4 x 3 = 12
	Counting in fractional steps		
Year 4: 3.5 **2:3**	The line is divided into __ equal parts. This allows us to count in ___.	Structure	
Year 4: 3.5 **2:4**	The interval is divided into __ equal parts. This allows us to count in ___.	Structure	*'Each interval on the line is divided into four equal parts. This allows us to count in quarters.'* 

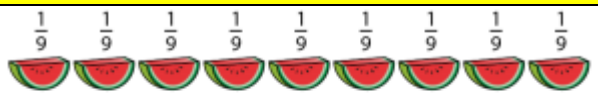
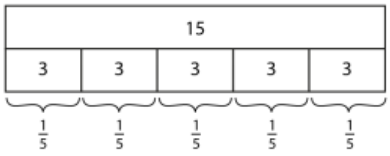
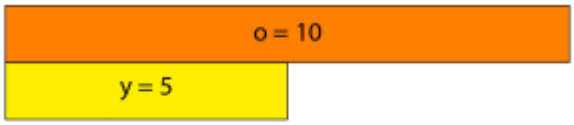
Improper fractions and mixed numbers			
Year 3: 3.5 **1:2**	Quantities made up of both whole numbers and a fractional part can be expressed as mixed numbers.	Generalisation	
Year 3: 3.5 **5:4** **5:5** **5:6**	Each whole is divided into four equal parts. We have __ of these equal parts. |This represents ___ quarter(s)	Structure/ language	 Each whole is divided into four equal parts. We have 11 of these equal parts. This represents 11 quarter(s)
Year 4: 3.5 **5:8**	The denominator is ___. This means that each whole has been split into __ equal parts. __ parts make each whole. The numerator is ___. This means there are ___ equal parts. It is possible to make ___ full groups of ___ quarters and there are ___ more quarters.	Structure/ language	$\frac{10}{4}$   The denominator is 4. This means that each whole has been split into 4 equal parts. 4 parts make each whole. The numerator is 10. This means there are 10 equal parts. It is possible to make 2 full groups of 4 quarters and there are 2 more quarters
Year 4 3.5 **5:13**	Our unit is ___ so we will be thinking about groups of ____. There are _____ in one whole.	Structure / language	 $\frac{21}{8}$ • *'Our unit is eighths so we will be thinking about groups of eight.'* • *'There are $\frac{8}{8}$ in one whole.'* 
Year 4: 3.5 **5:14**	How many groups of ─ in ─ ___ groups and ___ more ___	Structure / language	
Year 4: 3.5 **5:16**	There are ___ groups of ___ sixths which is ___ sixths and __ more sixths, so that is ___ sixths	Structure / language	$3\frac{1}{6} = \frac{\square}{6}$ *'There are three groups of $\frac{6}{6}$ which is $\frac{18}{6}$, and one more sixth; that's $\frac{19}{6}$.'*  

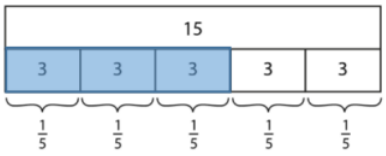
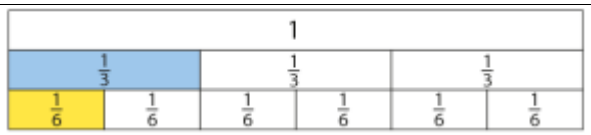
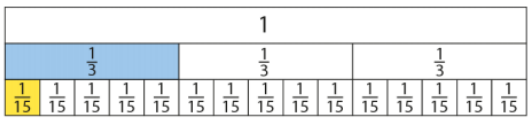
	Equivalent Fractions		
Year 5: 3.7 **1:9**	**When two or more fractions have the same value. We call them equivalent fractions.**	**Generalisation**	
Year 5: 3.7 **2:12**	The numerator has been scaled up/down by _____ The denominator has been scaled up/down by ___ These fractions are /are not equivalent.	Language / structure	 The numerator has been scaled up by 4 The denominator has been scaled up by 4 These fractions are equivalent.
Year 5: 3.7 **2:16**	'□/□ *is equivalent to* □/□'	Language / structure	 *'2/5 is equivalent to 4/10.'*
Year 5: 3.7 **2:20**	□/□ is equal □/□ because both the numerator and denominator have been scaled by a factor of ___	Language / structure	*'3/8 is equal 12/32 because both the numerator and denominator have been scaled by a factor of four'.*
Year 5: 3.7 **2:21**	**When the numerator and denominator are multiplied or divided by the same number, the value of the fractions remains the same.**	**Generalisation**	
	Simplifying Fractions		
Year 5: 3.7	The highest common factor is ____so divide the numerator and denominator by ____	Language / structure	 The highest common factor is 4 so divide the numeraotr and denominator by 4
Year 5: 3.7 **3:5**	**A fraction can be simplified when the numerator and denominator have a common factor other than one.**	**Generalisation**	
Year 5: 3.7 **3:5**	**To write a fraction in its simplest form, divide both the numerator and denominator by their highest common factor.**	**Generalisation**	Highest common factor = 3 

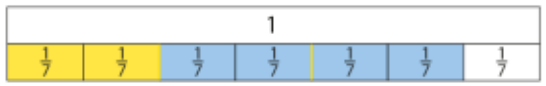
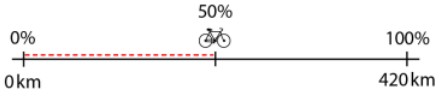
Year 5: 3.7 **3:8**	$\frac{\square}{\square}$ is not in its simplest form because ___is a common factor of ___ and ___ $\frac{\square}{\square}$ is in its simplest form because one is the only common factor of __ and __.	Language / structure.	*'Sort the following numbers according to whether they are expressed in their simplest form or not.'* $\frac{3}{15}$ $\frac{2}{5}$ $\frac{4}{20}$ $\frac{25}{36}$ $\frac{1}{6}$ $\frac{7}{21}$ $\frac{18}{30}$ $\frac{9}{17}$ $\frac{5}{15}$ $\frac{11}{20}$ $\frac{23}{30}$ In its simplest form / Not in its simplest form 4/20 is not in its simplest form because four is a common factor of 4 and 20 23/50 is in its simplest form because one is the only common factor of 23 and 30.
	Comparing Fractions		
Year 3: 3.3 **7:2**	'$\frac{\square}{\square}$ *is ___ lot of* $\frac{1}{\square}$' '$\frac{\square}{\square}$ *is ___ lots of* $\frac{1}{\square}$' *'I know that ___ is less than ___...'* *'...so* $\frac{\square}{\square}$ *is less than* $\frac{\square}{\square}$'	Language / structure	 $\frac{1}{4} < \frac{3}{4}$ ¼ is 1 lots of ¼ ¾ is 3 lots fo ¼ I know that 1 is less than 3 so ¼ is less than ¾.
Year 3: 3.3 **7:5** 3.5 **3:3**	**When we compare fractions with the same denominator, the greater the numerator, the greater the fraction.**	**Generalisation**	 $\frac{3}{8} < \frac{5}{8}$ $\frac{18}{24}$ $\frac{23}{24}$ 18 lots of $\frac{1}{24}$ 23 lots of $\frac{1}{24}$ $\frac{18}{24} < \frac{23}{24}$
Year 3: 3.3 **8:1** **8:4**	**When comparing unit fractions, the greater the denominator the smaller the fraction.**	**Generalisation**	 $\frac{1}{6} < \frac{1}{3}$
Year 3: 3.3 **8:12**	**When we compare fractions with the same numerator, the greater the denominator, the smaller the fraction.**	**Generalisation**	 $\frac{2}{10} > \frac{2}{12}$
Year 5: 3.8 **5:1**	**To compare fractions with different numerators and denominator convert to common denominators.**	**Generalisation**	 $\frac{1}{3} < \frac{3}{4}$ $\frac{4}{12} < \frac{9}{12}$

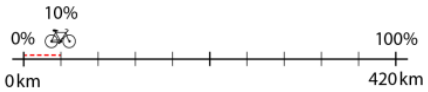
	Adding and subtracting Fractions		
Year 3: 3.3 **5:2**	$\frac{\square}{\square}$ *is ___ lot of* $\frac{1}{\square}$	Language / structure	 $\frac{1}{5}+\frac{1}{5}+\frac{1}{5}=\frac{3}{5}$ $\frac{3}{5}=\frac{1}{5}+\frac{1}{5}+\frac{1}{5}$ 3/5 is 3 lots of 1/5.
Year 3: 3.4 **1:7**	____ tenths and __ more tenths make _____ tenths.	Structure	 6 tenths and 2 more tenths make 8 tenths.
Year 3: 3.4 **1:9**	'$\frac{\square}{\square}$ *is ___ lots of* $\frac{\square}{\square}$' '$\frac{\square}{\square}$ *is ___ lots of* $\frac{\square}{\square}$' *'I know that ___ + ___ = ___'* *'...so, I know that* $\frac{\square}{\square}+\frac{\square}{\square}=\frac{\square}{\square}$'	Structure	'$\frac{6}{10}$ *is six lots of* $\frac{1}{10}$.' '$\frac{2}{10}$ *is two lots of* $\frac{1}{10}$.' *'I know that* $6+2=8$.' *'...so, I know that* $\frac{6}{10}+\frac{2}{10}=\frac{8}{10}$.'
Year 3: 3.4 **1:12**	**When adding fractions with the same denominators, just add the numerators.**	**Generalisation**	
Year 3: 3.4 **2:3**	___/10 is ____ lots of 1/10 ___/10 is ____ lots of 1/10 I know that ___ = ___ = ___ So I know that __/10 - __/10 = __/10	Structure	 Method 3 – verbal reasoning: • '$\frac{8}{10}$ *is eight lots of* $\frac{1}{10}$.' • '$\frac{2}{10}$ *is two lots of* $\frac{1}{10}$.' • *'I know that* $8-2=6$.' *'...so, I know that* $\frac{8}{10}-\frac{2}{10}=\frac{6}{10}$.'
Year 3: 3.4 **2:5**	**When subtracting fractions with the same denominators, just subtract the numerators.**	**Generalisation**	$\frac{8}{9}-\frac{3}{9}=\frac{5}{9}$ $\frac{8}{10}-\frac{2}{10}=\frac{6}{10}$
Year 4: 3.4 **4:3**	**To subtract from one whole, first convert the whole to a fraction where the denominator and numerator are the same.**	**Generalisation**	*'A watermelon is cut into 8 equal pieces.'* '$\frac{6}{8}$ *of the watermelon is eaten.'* *'What fraction of the watermelon is left?'*  $1-\frac{6}{8}=\frac{2}{8}$ $\frac{8}{8}-\frac{6}{8}=\frac{2}{8}$

Year 4: 3.5 **4:2**	The parts are ___ and __. The total or whole is ___.	Language / structure.	 *'The **parts** are $\frac{2}{5}$ and $1\frac{1}{5}$. The **total**, or **whole**, is $1\frac{3}{5}$.'*
Year 5: 3.8 **1:6**	**Related fractions have denominators where one denominator is a multiple of the other.**	**Generalisation**	$\frac{1}{3}$ and $\frac{1}{9}$  *'We can change $\frac{1}{3}$ to $\frac{3}{9}$.'*
Year 5: 3.8 **1:8**	$\frac{\square}{\square}$ and $\frac{\square}{\square}$ are realted fractions because the denominator ___ is a multiple of the other denominator ___	Structure / language	 *'$\frac{1}{16}$ and $\frac{1}{4}$ are related fractions because the denominator, "16", is a multiple of the other denominator, "4".'*
Year 5: 3.8	**Fractions must have the same denominator before they can be added or subtracted.**	**Generalisation**	
Year 5: 3.8	**When fractions have the same denominator, we call this a common denominator.**	**Generalisation**	
Year 5: 3.8	**To add or subtract fractions with different denominators, first convert to fractions with a common denominator.**	**Generalisation**	 To solve 1/3 + 1/6, convert 1/3 to 2/6 by scaling 1 and 3 up by two then add 2/6 and 1/6 together.
Year 5: 3.8	**To find a common denominator, identify the lowest common multiple of the denominators then create an equivalent fraction.**	**Generalisation**	 Multiples of 3: 3, 6, 9, 12, 15 Multiples of 5: 5, 10, 15 The lowest common multiple of 3 and 5 is 15.
Year 5: 3.8	**We can find a common denominator for two non-related fractions by multiplying their denominators.**	**Generalisation**	 If you multiply the two denominators 3 and 5 you will get the common denominator product of 15.

Multiplying whole numbers and fractions			
Year 4: 3.6 **1:5**	The whole has been divided into ___ equal parts, and one of these parts is _____.	Structure	 $\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}+\frac{1}{9}=9\times\frac{1}{9}$ • *'The whole has been divided into nine equal parts, and one of these parts is $\frac{1}{9}$.'*
Year 4: 3.6 **1:8** **1:10**	____ lot(s) of ____ is equal to ____.	Structure / language	 • $\frac{2}{9}+\frac{2}{9}+\frac{2}{9}+\frac{2}{9}$ • $4\times\frac{2}{9}$ • $\frac{2}{9}\times4$ • *'Four lots of $\frac{2}{9}$ is equal to $\frac{8}{9}$.'*
Year 4: 3.6 **1:9** **1:16**	**To multiply a fraction and a whole number, we multiply the numerator by the whole number and keep the denominator the same.**	**Generalisation**	
Year 4: 3.6 **1:14**	___ lots of ___ is equal to ___ lots of ___.	Structure	Commutativity: $3\times\frac{4}{5}=\frac{12}{5}=2\frac{2}{5}$ $\frac{4}{5}\times3=\frac{12}{5}=2\frac{2}{5}$ 3 x 4/5 = 4/5 x 3
Year 4: 3.6 **3:4** **3:5**	*'___ is divided into ___ equal parts;* *'Each part is $\frac{1}{\square}$ of the whole;* *$\frac{1}{\square}$ of ___ is ___.'*	Structure / language	 *'Each part is $\frac{1}{5}$ of the whole;* *$\frac{1}{5}$ of 15 is 3.'*
Year 4: 3.6 **3:6**	__ of __ = ___ ___ lots of ___ = _____	Structure / language	 *'$\frac{1}{2}$ of 10 = 5'* *'2 lots of 5 = 10.'*
Year 4: 3.6 **3:7**	**When a whole number is multiplied by a unit fraction, it makes the whole number smaller**	**Generalisation**	

Year 4: 3.6 **4:2**	**To calculate a fraction of a quantity, find the unit fraction of the quantity. Then multiply the unit fraction by the numerator.**	**Generalisation**	Calculate $\frac{3}{5}$ of 15  Find the unit fraction ($\frac{1}{5}$) of 15 by dividing 15 into five equal parts. $\frac{1}{5}$ of 15 is 3 so $\frac{3}{5}$ of 15 is 9.
Year 4: 3.6 **4:6**	**When a whole number is multiplied by a proper fraction, it makes the whole number smaller**	**Generalisation**	
Year 6: 3.9 **1:2**	There were ___equal parts in the whole. Each of the three parts was halved so we now have ___ equal parts in the whole.	Language / structure	 There were 3 equal parts in the whole. Each of the three parts was halved so we now have six equal parts in the whole.
Year 6: 3.9 **1:4**	**When multiplying unit fractions, multiply the denominators.**	**Generalisation**	$\frac{1}{2}\times\frac{1}{6}=\frac{1}{12}$ $\frac{1}{6}\times\frac{1}{2}=\frac{1}{12}$ $\frac{1}{3}\times\frac{1}{5}=\frac{1}{15}$ $\frac{1}{5}\times\frac{1}{3}=\frac{1}{15}$
Year 6: 3.9 **1:4**	**When multiplying unto fractions, the product is smaller than the fractions being multiplied. .**	**Generalisation**	
Year 6: 3.9 **1:10**	**To multiply fractions, we can multiply the numerators ad multiply the denominators.**	**Generalisation**	$\frac{4}{5}\times\frac{2}{3}=\frac{8}{15}$
Dividing fractions			
Year 6: 3.9 **2:5**	To divide a fraction by a whole number, we can change it to an equivalent multiplication. To divide by ___, we can multiply by ___.	Structure	 $\frac{1}{3}\div 5=\frac{1}{15}\rightarrow\frac{1}{3}\times\frac{1}{5}=\frac{1}{15}$ *'To divide a fraction by a whole number, we can change it to an equivalent multiplication. To divide by five, we can multiply by $\frac{1}{5}$.'*
Year 6: 3.9 **3:1**	**To divide a fraction by a whole number, we can change it to an equivalent multiplication.**	**Generalisation**	

Year 6: 3.9 **3:1**	To divide by ___ we can multiply by ___	Structure	$\frac{1}{3} \div 4 = \frac{1}{12}$ $\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$
Year 6: 3.9 **3:3**	If we divide into __ equal groups, then each of the groups is because ___ ÷__ = __	Structure	$\frac{6}{7} \div 3$  = 2/7 If we divide six 1/7 into 3 equal groups, then each of the groups os 2/7 because 6 ÷3 = 2
Year 6: 3.9 **3:1**	**If the divisor is a factor of the numerator, just divide the numerator by the denominator and keep the denominator the same.**	**Generalisation**	$\frac{8}{10} \div 4 = \frac{2}{10}$ 
Linking fractions, decimals and percentages			
Year 6: 3.10	In order to use a place value chart to help convert a fraction to a decimal, the fraction must be expressed as a tenth, hundredth or thousandth.	Generalisation	$\frac{1}{5} = \frac{2}{10}$ ones | tenths 0 • 2
Year 6: 3.10	**A fraction can be converted into a decimal by dividing the numerator by the denominator.**	**Generalisation .**	$\frac{1}{5} = 5\overline{)1 \cdot 0}$ 0 • 2
Year 6: 3.10 **1:9**	• '___.___ is equivalent to $\frac{\square}{\square}$.' 'We know that $\frac{\square}{\square} < \frac{\square}{\square}$, so ___.___ < $\frac{\square}{\square}$.' or • '$\frac{\square}{\square}$ is equivalent to ___.___.' 'We know that ___.___ < ___.___, so ___.___ < $\frac{\square}{\square}$.'	Structure	'0.6 is equivalent to $\frac{3}{5}$.' 'We know that $\frac{3}{5} < \frac{4}{5}$, so $0.6 < \frac{4}{5}$.' $0.6 < \frac{4}{5}$ $0.6 = \frac{3}{5}$ $\frac{3}{5} < \frac{4}{5}$
Year 6: 3.10 **5:7** **5:8**	**In order to convert a percentages to a fraction, first convert it to a fraction with a denominator of 100 then simplify.**	**Generalisation**	$45\% = \frac{\square}{100} = \frac{\square}{20}$ $12\% = \frac{12}{100} = \frac{3}{25}$ (÷4, ÷4)
Year 6: 3.10 **6:1**	**To find 50% of a number, halve it.**	**Generalisation**	'Zara is doing a 420 km charity bike ride. So far, she has completed 50% of the route. How far has she cycled?'  • '100% of 420 km is 420 km.' • '50% of 420 km is $\frac{1}{2}$ of 420 km.' • 'Zara has cycled 210 km.'

Year 6: 3.10 **6:2**	**To find 10% of a number, divide it by ten.**	**Generalisation**	*'Rishi has completed 10% of the same bike ride. How far has he cycled?'*  • *'100% of 420 km is 420 km.'* • *'10% of 420 km is $\frac{1}{10}$ of 420 km.'* • *'Rishi has cycled 42 km.'*
Year 6: 3.10 **6:3**	**To find 1% of a number, divide it by hundred.**	**Generalisation .**	*'100% of 420 km is 420 km.'* *'1% of 420 km is $\frac{1}{100}$ of 420 km.'* *'James has cycled 4.2 km.'*