

Topics in this cycle:	Taught: Autumn 2	Year Group: 7
Key knowledge/concepts to be learnt ('Tell me about...')		Websites/blogs/YouTube links and further reading to deepen and consolidate learning
<p>Place value and proportion</p> <ul style="list-style-type: none"> • Recognise the place value in numbers • Find a missing number on a number line • Rounding of integers to the nearest powers of 10 • Ordering/comparing integers • Find a range and median from a list • Ordering/comparing decimals • Rounding to 1SF • Investigate positive/negative powers of 10 • Standard Form <p>FDP Equivalence</p> <ul style="list-style-type: none"> • Pictorial representation of tenths and hundredths • Change between fraction and decimal on a number line • Convert between fractions and decimals • Simple conversion of FDP • Use and interpret Pie Chart • Representing fractions • Equivalent fractions • Convert between FDP 		<p> https://vimeo.com/469025929 https://vimeo.com/471731445 https://vimeo.com/453593456 https://vimeo.com/522240829 https://vimeo.com/478518362 https://vimeo.com/491143317 </p> <p> https://vimeo.com/481601101 https://vimeo.com/491237616 https://vimeo.com/481601482 https://vimeo.com/484049498 </p>

Key Vocabulary and Definitions To Be Learnt		What Will The Assessment Look Like?
Integer	Whole number	<p>Please follow the link to a full breakdown of topics covered in November assessment.</p> <p>Link:</p> <p>You may also want to try some samples of questions:</p> <p>Link:</p>
Place Holder	'0' is used as place holder in decimals to compare and compute	
Digit	Single number that has a particular value	
Approximating	Rounding a number to close to what it is	
Greater than	'>' an inequality symbol that shows left side is greater than the right side	
Less than	'<' an inequality symbol that shows left side is less than the right side	<p>Family Learning Opportunities</p> <p>Support you child at busting XP levels on SPARX MATH HOMEWORK.</p> <p><u>Test understanding by asking questions:</u></p> <p><u>Place value and proportion</u></p> <ul style="list-style-type: none"> • <u>Recognise the place value in numbers</u> Why do we need placeholders? What strategies can you use to work out the value of a digit in a very long integer? • <u>Understand and write integers:</u> Why do we use spaces or commas in large integers? Where do we put them? • <u>Find a missing number on a number line:</u> Why do we count the number of spaces rather than the number of marks on a number line? Which are the most important points to label on a number line or other scale? Why?
Ascending order	Ordering from smallest to greatest	
Descending order	Ordering from greatest to smallest	
Significant figure	The first (from the left) non-zero digit in a number	
Equivalent	Same in value	

		<p>Why can we mark some numbers exactly on a number line but others only approximately? Describe the steps you need to take to read a number off a line of a scale.</p> <ul style="list-style-type: none"> • <u>Rounding of integers to the nearest powers of 10:</u> Why do we round numbers? When talking about the population of the UK, would you round to the nearest hundred, thousand or million? What about the population of Leeds? • <u>Ordering/comparing integers:</u> What do you look at first when comparing the size of two integers? What do you look at next? Is it true that if $a > b$ and $b > c$ then $a > c$? Why is the leading digit of a number important when ordering? For a set of integers, is the longest number always the largest number? • <u>Find a range and median from a list:</u> How do you calculate the range of a set of numbers? When given a list of numbers to find the range of, what might it be helpful to do first? What do you need to do first when finding the median of a list of numbers? What is different about the median and the range? • <u>Ordering/comparing decimals:</u> Why do we say “0.37” as “nought point three seven” rather than “nought point thirty-seven”? Why is 0.4 bigger than 0.29, even though twenty-nine is bigger than 4? How do we work out the size of an interval on a number line? What is different when thinking about the position of 0.3 and 0.03? When you see a list of decimal numbers, is the longest number always the largest number? When ordering numbers, why are the leading digits important?
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		<p>How accurate can we be estimating proportions from pie charts?</p> <ul style="list-style-type: none">• <u>Representing fractions:</u> Can you use the same diagram to represent both one-third and two-thirds? Does a diagram have to be cut into equal parts in order to identify the fraction shaded or not shaded?• <u>Equivalent fractions:</u> What makes a fraction equivalent to another fraction? How many equivalent fractions are there for any one fraction? Why are equivalent fractions useful in making comparisons? How are they used in day to day life?• <u>Convert between FDP</u> Why do we use all three representations of fractions, decimals and percentages? Where would you see each type? What happens if we try to change thirds into a decimal or percentage? <p><u>More:</u> Find out why we use need Standard Form: https://youtu.be/uaGEjrADGPA</p> <p>Have a look at interpreting Pie Charts: https://youtu.be/SxSewF7E1-0?si=rZ6Sr8Mgor6CNeD9</p> <p>let's have some fun with FDP: https://youtu.be/REycq707eCk</p>
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