

Essentials at WPA As a Year 1 mathematician I will...	
Presentation	Knowledge
<p>Write the date in numerical form. Underline the date with a ruler. Begin to form the numbers 0-9 correctly.</p>	<p>Count within 100, forwards and backwards starting with any number. Be able to reason and explain the location of a number to 20 on a number line. Compare numbers to 20 using $<$ $>$ and $=$ Be fluent in addition and subtraction facts within 10. Count forwards and backwards in multiples of 2, 5 and 10. Understand odd and even numbers. Recognise common 2D and 3D shapes in different orientations. Compose 2D and 3D shapes to match an example given. <i>To understand what a half and quarter is.</i> <i>To tell the time to the hour and half past the hour.</i></p>

Essentials at WPA As a Year 2 mathematician I will...	
Presentation	Knowledge
<p>Write the date in numerical form. Underline the date with a ruler accurately. Form the numbers 0-9 correctly and consistently. Begin to write one digit per square.</p>	<p>Recognise the place value of each digit in two-digit numbers in a standard and non-standard way. Explain the location of any two-digit number on a number line, discussing the previous and next multiple of 10. Secure fluency in addition and subtraction facts within 10. Add and subtract across 10. Recognise the subtraction structure of difference and answer questions such as "How many more...?" Add and subtract within 100 drawing on several strategies. Recognise repeated addition contexts and represent them as multiplication calculations. Relate grouping problems with division. Use precise language to describe properties of 2D and 3D shapes. <i>Find a half, a quarter, and a third of a shape or quantity.</i> <i>To tell the time to five minutes.</i></p>

Essentials at WPA As a Year 3 mathematician I will...	
Presentation	Knowledge
<p>Write the date in numerical form. Underline the date with a ruler accurately. Rule off after the last piece of work. Write a short title if required underneath the date. Form the numbers 0-9 correctly and consistently. Use one digit per square consistently.</p>	<p>Calculate how many tens there are in other three-digit multiples of 10. Recognise the place value of each digit in a three-digit number and partition these numbers in standard and non-standard ways. Reason and locate any three-digit number on a number line, including identifying the previous and next multiple of 100. Divide 100 into 2, 4, 5 and 10 equal parts and read scales in these increments. Secure fluency in addition and subtraction facts that bridge 10. Recall multiplication and division facts in the 10, 5, 2, 4 and 8 tables. Use place value knowledge to other additive and multiplicative number facts. Calculate complements to 100. Solve column addition and subtraction problems. Understand the inverse relationship between addition and subtraction. Apply known multiplication and division facts to solve problems. Understand proper fractions that represent 1 whole. Find unit fractions of quantities using known multiplication facts. Reason about the location of fractions within 1 on a number line. Add and subtract fractions with the same denominator. Recognise right angles as a property of a shape. Identify parallel and perpendicular lines.</p>

Essentials at WPA As a Year 4 mathematician I will...	
Presentation	Knowledge
<p>Write the date in numerical form. Underline the date with a ruler accurately. Rule off after the last piece of work. Write a short title if required underneath the date. Form the numbers 0-9 correctly and consistently. Use one digit per square consistently. Use a ruler to draw diagrams, representations and tables to present work to a high standard.</p>	<p>Calculate how many 100s there are in four-digit numbers. Recognise the place value of each digit in a four-digit number, and partition them into standard and non-standard partitioning. Reason and locate any four-digit number on a number line, identifying the previous and next multiple of 1000 and 100 to help round to the nearest of each. Divide 1000 into 2, 4, 5 and 10 equal parts and read scales with these intervals. Recall multiplication and division facts to 12 x 12 Divide a two-digit by a one-digit and interpret remainders. Apply place value knowledge to known additive and multiplicative number facts. Multiply and divide whole numbers by 10 and 100 Apply the commutative property of multiplication. Apply the distributive property of multiplication. Reason and locate mixed numbers on a number line. Convert between mixed numbers and improper fractions. Add and subtract improper and mixed fractions with the same denominator with the answer greater than 1. Draw polygons specified by coordinates in the first quadrant and translate within the first quadrant. Identify regular polygons. Find the perimeter of regular and irregular polygons. Identify line symmetry in 2D shapes in different orientations. Complete a symmetric figure or pattern. <i>Read, write and convert time between the 12- and 24-hour clocks.</i></p>

Essentials at WPA As a Year 5 mathematician I will...	
Presentation	Knowledge
<p>Write the date in numerical form. Underline the date with a ruler accurately. Rule off after the last piece of work. Write a short title if required underneath the date. Form the numbers 0-9 correctly and consistently. Use one digit per square consistently. Use a ruler to draw diagrams, representations and tables to present work to a high standard. Use a protractor to measure angles accurately</p>	<p>Know that 10 tenths are equivalent to 1. Know that 100 hundredths are equivalent to 1. Know that 10 hundredths are equivalent to 1 tenth. Recognise the place value of each digit in numbers up to 2 decimal places and partition these numbers in standard and non-standard ways. Reason about the location of any number with up to 2 decimal places on a number line and be able to identify the next multiple of 1 and 0.1 when rounding. Divide 1 into 2, 5 and 10 equal parts and read scales in these intervals. Convert between units of measure including those with common decimals and fractions. Have a secure fluency in all multiplication and division facts. Apply place-value knowledge to known additive and multiplicative number facts. Multiply and divide numbers by 10 and 100 Find factors and multiples of positive whole numbers, including common factors and common multiples and express a given number as a product of 2 or 3 factors. Multiply any whole digits with up to 4 digits by any one-digit number. Divide a number up to 4 digits by a one-digit number interpreting remainders appropriately for the context. Find non-unit fractions of quantities. Find equivalent fractions and understand that they have the same value and position on a number line. Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{10}$ and for multiples of these fractions. Compare, estimate and measure angles in degrees and draw angles of a given size. Compare the areas and calculate the area of rectangles using standard units.</p>

Essentials at WPA As a Year 6 mathematician I will...	
Presentation	Knowledge
<p>Write the date in numerical form. Underline the date with a ruler accurately. Rule off after the last piece of work. Write a short title if required underneath the date. Form the numbers 0-9 correctly and consistently. Use one digit per square consistently. Use a ruler to draw diagrams, representations and tables to present work to a high standard. Use a protractor to measure angles accurately. Use a compass accurately to draw circles. Draw a range of 2D shapes to the correct dimensions.</p>	<p>Understand the powers of ten and be able to multiply any given number by 10, 100 and 1000. Recognise the value of each digit in numbers up to 10 million, including decimal fractions. Be able to reason about the location of any number up to 10 million on a number line, including decimal fractions. Divide numbers into 2, 4, 5 and 10 equal parts and read scales in these intervals. Understand additive and multiplicative relationships between two numbers. Use number facts to derive related calculations, including inverse relationships and place-value understanding. Solve problems involving ratio relationships. Solve problems where there are two unknowns. Recognise when fractions need to be simplified and use common factors to simplify fractions. Express fractions in a common denomination and use this to compare fractions. Compare fractions with different denominators including those greater than one. Draw, compose and decompose shapes according to given properties, including dimensions, angles and area and solve related problems.</p>