

Medium term Plans for Summer Years 5/6 Mixed age Range

IMPORTANT note for Y6 SATS revision: Teachers in areas where the Summer term starts AFTER 13th April (e.g. on 20th April) will have only three weeks for Sats revision in the summer term. Since we allow four weeks Sats revision (weeks beginning 13th, 20th, 27th April and 4th May) these teachers must have taught the first week of the Summer term at the end of the Spring term.

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
1	<p>Number, place value and time</p> <p>Day 1: Compare and order negative numbers.</p> <p>Day 2: Count back in steps through 0.</p> <p>Day 3: Add and subtract 1, 10, 100, 1000, 10,000 and 100,000 to/from 6-digit numbers.</p> <p>Day 4: Place 6-digit numbers on landmarked lines and empty lines.</p> <p>Day 5: Round 6-digit numbers to the nearest 1000, 10,000, and 100,000.</p>	<p>Day 1: 1. Compare negative numbers on a line. 2. Order negative and positive numbers.</p> <p>Day 2: 1. Count back in steps through zero.</p> <p>Day 3: 1. Add and subtract multiples of 1, 10, 100, 1000, 10,000 and 100,000 to/from 6-digit numbers.</p> <p>Day 4: 1. Place 6-digit numbers on landmarked lines and empty lines.</p> <p>Day 5: 1. Round 6-digit numbers to the nearest 1000, 10,000, and 100,000.</p>	<p>Number, place value and time</p> <p>Day 1: Order fractions by converting them to fractions with the same denominator; Label negative numbers.</p> <p>Day 2: Order numbers with up to 3 decimal places, including mixed numbers of places.</p> <p>Day 3: Find multiples and factors.</p> <p>Day 4: Reading scales.</p> <p>Day 5: Finding time intervals.</p>	<p>Day 1: 1. Order fractions with different denominators. 2. Label positive and negative numbers on a number line.</p> <p>Day 2: 1. Order decimals and place on a line.</p> <p>Day 3: 1. Recognise multiples of 2 to 10 up to the 10th multiple. 2. Find common multiples. 3. Find factors of 2-digit numbers.</p> <p>Day 4: 1. Read and interpret scales on a range of measuring instruments. 2. Know equivalent units of measure.</p> <p>Day 5: 1. Tell the time on digital and analogue clocks. 2. Read and use timetables using the 24-hr clock.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
2	<p>Number, Addition and subtraction and Measures</p> <p>Day 1: Read/write Roman numerals to 1000 (M).</p> <p>Day 2: Recognise years written in Roman numerals.</p> <p>Day 3: Revise 2-place decimals.</p> <p>Day 4: Introduce 3-place decimals.</p> <p>Day 5: Multiply and divide by 10, 100, 1000.</p>	<p>Day 1: 1. Read and write Roman numerals to 1000 (M).</p> <p>Day 2: 1. Recognise years written in Roman numerals.</p> <p>Day 3: 1. Say what each digit represents in a number with 2 decimal places. 2. Round numbers with 2 decimal places to the nearest whole or tenth. 3. Say a number in between a pair of numbers with 2 decimal places.</p> <p>Day 4: 1. Say what each digit represents in a number with 3 decimal places. 2. Write place value additions and subtractions.</p> <p>Day 5: 1. Multiply and divide by 10, 100 and 100 to give answers with 1, 2 or 3 decimal places.</p>	<p>Number, Addition and subtraction and Measures</p> <p>Day 1: Choose how to work out additions.</p> <p>Day 2: Choose how to work out subtractions.</p> <p>Day 3: Solve problems.</p> <p>Day 4: Find perimeter and area by counting squares and using formulae.</p> <p>Day 5: Find areas of triangles and areas and perimeters of compound shapes.</p>	<p>Day 1: 1. Add two-, three- or 4-digit numbers including decimals using mental or written methods.</p> <p>Day 2: 1. Subtract two-, three- or 4-digit numbers including decimals using mental or written methods.</p> <p>Day 3: 1. Solve word problems. 2. Use inverse operations to solve missing number problems.</p> <p>Day 4: 1. Calculate the area and perimeter of rectangles. 2. Count whole and half squares to find the area of irregular shapes.</p> <p>Day 5: 1. Find the perimeter of compound shapes. 2. Find the area of right-angled triangles and compound shapes.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
3	<p>Multiplication, division and Percentages</p> <p>Day 1: Multiply and divide numbers mentally drawing upon known facts.</p> <p>Day 2: Solve word problems needing mental multiplication or division.</p> <p>Day 3: Introduce percentages.</p> <p>Day 4: Know equivalence between percentages and fractions.</p> <p>Day 5: Use equivalence with fractions to find percentages.</p>	<p>Day 1: 1. Multiply and divide numbers mentally drawing upon known facts. 2. Express remainders as fractions.</p> <p>Day 2: 1. Solve word problems using mental multiplication or division.</p> <p>Day 3: 1. Begin to understand percentages as part out of 100.</p> <p>Day 4: 1. Know common equivalence between fraction and percentages.</p> <p>Day 5: 1. Use equivalence with fractions to find percentages.</p>	<p>Multiplication, division and Percentages</p> <p>Day 1: Work out how to solve multiplication questions, choosing an appropriate method and showing workings.</p> <p>Day 2: Work out how to solve division questions, choosing an appropriate method and showing workings.</p> <p>Day 3: Solve 'mystery number'-type problems.</p> <p>Day 4: Solve multi-step problems.</p> <p>Day 5: Use equivalence with fractions to find percentages.</p>	<p>Day 1: 1. Multiply 3 and 2-digit numbers by 2 and 1-digit numbers including decimals choosing an appropriate method and showing workings.</p> <p>Day 2: 1. Divide 3 and 2-digit numbers by 2 and 1-digit numbers including decimals choosing an appropriate method and showing workings.</p> <p>Day 3: 1. Solve mystery number-type problems.</p> <p>Day 4: 1. Solve and write equalities. 2. Solve number puzzles.</p> <p>Day 5: 1. Solve problems involving percentages.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
4	<p>Shape and data</p> <p>Day 1: Measure and draw angles using a protractor.</p> <p>Day 2: Recognise acute, obtuse and reflex angles.</p> <p>Day 3: Know that angles on a straight line add to 180°; find missing angles.</p> <p>Day 4: Know that angles on a straight line add to 360°; use this to find missing angles.</p> <p>Day 5: Draw polygons to given dimensions and angles.</p>	<p>Day 1: 1. Measure and draw angles using a protractor to the nearest degree.</p> <p>Day 2: 1. Recognise acute, right, obtuse and reflex angles.</p> <p>Day 3: 1. Use a pair of compasses to draw circle. 2. Know that angles in straight line add up to 180° and use this to work out missing angles. 3. Use a protractor to measure angles.</p> <p>Day 4: 1. Know that angles in straight line add up to 360° and use this to work out missing angles.</p> <p>Day 5: 1. Draw polygons to given dimensions and angles.</p>	<p>Shape and data</p> <p>Day 1: Visualise where a shape will be after reflection, after translation, or after rotation; Measure and draw angles using a protractor.</p> <p>Day 2: Classify 2D shapes.</p> <p>Day 3: Find the mode and range.</p> <p>Day 4: Find the mode, median and mean.</p> <p>Day 5: Interpret graphs and pie charts.</p>	<p>Day 1: 1. Visualise and draw on grids where a shape will be after rotation through 90 or 180 degrees about its centre or about one of its vertices. 2. Use a 360° protractor to measure angles to the nearest degree.</p> <p>Day 2: 1. Classify and describe 2D shapes, using a range of vocabulary.</p> <p>Day 3: 1. Draw and interpret frequency tables and bar graphs of grouped data. 2. Find the range and mode of a group of data.</p> <p>Day 4: 1. Understand the concept of average, find range, mode, median and mean.</p> <p>Day 5: 1. Interpret a range of graphs including pie charts.</p>
5	SATS WEEK		SATS WEEK	

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
6	<p>Fractions and subtraction</p> <p>Day 1: Use equivalence to compare and order fractions; convert improper fractions to mixed numbers.</p> <p>Day 2: Add and subtract fractions with related denominators.</p> <p>Day 3: Add and subtract mixed numbers with related denominators.</p> <p>Day 4: Revise column subtraction of 5-digit numbers.</p> <p>Day 5: Choose counting up (Frog), counting back or column subtraction.</p>	<p>Day 1: 1. Use equivalence to compare and order fractions. 2. Convert improper fractions to mixed numbers.</p> <p>Day 2: 1. Add and subtract fractions with related denominators.</p> <p>Day 3: 1. Add and subtract mixed numbers with related denominators.</p> <p>Day 4: 1. Use column subtraction to subtract pairs of 5-digit numbers.</p> <p>Day 5: 1. Choose counting up (Frog), counting back or column subtraction</p>	<p>Fractions and subtraction</p> <p>Day 1: same for Y6.</p> <p>Day 2: same for Y6.</p> <p>Day 3: same for Y6.</p> <p>Day 4: same for Y6.</p> <p>Day 5: same for Y6.</p>	<p>Day 1: 1. Use equivalence to compare and order fractions. 2. Convert improper fractions to mixed numbers.</p> <p>Day 2: 1. Add and subtract fractions with related denominators.</p> <p>Day 3: 1. Add and subtract mixed numbers with related denominators. 2. Begin to subtract mixed numbers where the first needs to be broken down, e.g. $4\frac{1}{2} - 2\frac{3}{4}$.</p> <p>Day 4: 1. Use column subtraction to subtract pairs of 6-digit numbers.</p> <p>Day 5: 1. Choose counting up (Frog), counting back or column subtraction</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
7	<p>Multiplication/division and ratio</p> <p>Day 1: Find common multiples and common factors.</p> <p>Day 2: Solve problems requiring scaling by simple fractions.</p> <p>Day 3: Recognise and use square numbers and cube numbers.</p> <p>Day 4: Use short division to divide 4-digit numbers by single-digit numbers, including those that leave a remainder.</p> <p>Day 5: Use short division to divide 4-digit numbers by single-digit numbers, expressing the remainders as fractions.</p>	<p>Day 1: 1. Find common multiples of single-digit numbers and common factors of 2-digit numbers.</p> <p>Day 2: 1. Solve problems requiring scaling by simple fractions.</p> <p>Day 3: 1. Find square numbers to at least 10^2 and cube numbers to at least 10^3.</p> <p>Day 4: 1. Use short division to divide 4-digit numbers by single-digit numbers, including those which leave a remainder.</p> <p>Day 5: 1. Use short division to divide 4-digit numbers by single-digit numbers, expressing remainders as fractions.</p>	<p>Multiplication/division and ratio</p> <p>Day 1: same for Year 6.</p> <p>Day 2: same for Year 6.</p> <p>Day 3: Investigate a general statement.</p> <p>Day 4: Describe and extend sequences.</p> <p>Day 5: Find and use ratios; Use a calculator and interpret the display.</p>	<p>Day 1: 1. Find lowest common multiples of single-digit numbers and highest common factors of 2-digit numbers.</p> <p>Day 2: 1. Solve problems requiring scaling by simple fractions.</p> <p>Day 3: 1. Recognise prime numbers up to 50. 2. Investigate a general statement.</p> <p>Day 4: 1. Recognise and extend number sequences. 2. Use a calculator and interpret the display.</p> <p>Day 5: 1. Find and use ratios. 2. Interpret and round answers with decimals places on the calculator.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
8	<p>Multiplication and division</p> <p>Day 1: Use short multiplication to multiply 4-digit numbers by single-digit numbers.</p> <p>Day 2: Use grid method to multiply 2-digit numbers by 2-digit numbers.</p> <p>Day 3: Use grid method to multiply 3-digit numbers by 2-digit numbers.</p> <p>Day 4: Use long multiplication to multiply pairs of 2-digit numbers (one number less than 20).</p> <p>Day 5: Use long multiplication to multiply 3-digit numbers by 2-digit numbers (where the 2-digit number is less than 20).</p>	<p>Day 1: 1. Use short multiplication to multiply 4-digit numbers by single-digit numbers.</p> <p>Day 2: 1. Use grid method to multiply 2-digit numbers by 2-digit numbers.</p> <p>Day 3: 1. Use grid method to multiply 3-digit numbers by 2-digit numbers.</p> <p>Day 4: 1. Use long multiplication to multiply pairs of 2-digit numbers (one number less than 20).</p> <p>Day 5: 1. Use long multiplication to multiply 3-digit numbers by 2-digit numbers (where the 2-digit number is less than 20).</p>	<p>Multiplication and division</p> <p>Day 1: same for Y6.</p> <p>Day 2: same for Y6.</p> <p>Day 3: Use long division to divide 3-digit numbers by 2-digit numbers.</p> <p>Day 4: Use short multiplication to multiply 4-digit numbers by 1-digit numbers; make and test general statements.</p> <p>Day 5: Use long division to divide 3-digit numbers by 2-digit numbers.</p>	<p>Day 1: 1. Use short multiplication to multiply 4-digit numbers by single-digit numbers.</p> <p>Day 2: 1. Use grid method to multiply 2-digit numbers by 2-digit numbers.</p> <p>Day 3: 1. Use long division to divide 3-digit numbers by 2-digit numbers.</p> <p>Day 4: 1. Use short multiplication to multiply 4-digit numbers by single-digit numbers. 2. Make and test general statements.</p> <p>Day 5: 1. Use long or short division to divide 3-digit numbers by 12. 2. Make and test general statements.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
9	<p>Time, Line Graphs and rate</p> <p>Day 1: Read timetables using the 24-hour clock; calculate time intervals.</p> <p>Day 2: Calculate time intervals and find a time a given number of minutes or hours and minutes later.</p> <p>Day 3: Draw and interpret line graphs and read intermediate points.</p> <p>Day 4: Draw and interpret line graphs and read intermediate points; Introduce rate.</p> <p>Day 5: Solve problems involving rate.</p>	<p>Day 1: 1. Read timetables using the 24-hour clock. 2. Calculate time intervals.</p> <p>Day 2: 1. Calculate time intervals and find a time a given number of minutes or hours and minutes later.</p> <p>Day 3: 1. Draw and interpret line graphs and read intermediate points.</p> <p>Day 4: 1. Draw and interpret line graphs and read intermediate points. 2. Begin to understand the concept of a constant rate.</p> <p>Day 5: 1. Solve problems involving rate.</p>	<p>Time, Line Graphs and rate</p> <p>Day 1: same for Y6.</p> <p>Day 2: same for Y6.</p> <p>Day 3: Begin to learn how to draw scatter graphs.</p> <p>Day 4: same for Y6.</p> <p>Day 5: same for Y6.</p>	<p>Day 1: 1. Read timetables using the 24-hour clock. 2. Calculate time intervals.</p> <p>Day 2: 1. Calculate time intervals and find a time a given number of minutes or hours and minutes later including across midnight.</p> <p>Day 3: 1. Begin to draw and interpret scatter graphs.</p> <p>Day 4: 1. Draw and interpret line graphs and read intermediate points. 2. Understand the concept of a constant rate.</p> <p>Day 5: 1. Solve problems involving rate.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
10	<p>Decimals and subtraction</p> <p>Day 1: Revise place value in numbers with three decimal places; Convert between kilograms and grams, litres and millilitres, metres and kilometres.</p> <p>Day 2: Compare and order numbers with three decimal places and place on a line.</p> <p>Day 3: Revise using counting up (Frog) to subtract pairs of numbers with two decimal places.</p> <p>Day 4: Revise using counting up (Frog) to subtract numbers with different numbers of decimal places (1 or 2); Solve subtraction word problems.</p> <p>Day 5: Use counting up to find change and differences between prices; Check subtraction with addition.</p>	<p>Day 1: 1. Understand place value in numbers with three decimal places. 2. Convert between kilograms and grams, litres and millilitres, metres and kilometres.</p> <p>Day 2: 1. Compare and order numbers with three decimal places and place on a line.</p> <p>Day 3: 1. Use counting up (Frog) to subtract pairs of numbers with two decimal places.</p> <p>Day 4: 1. Use counting up (Frog) to subtract numbers with different numbers of decimal places (1 or 2). 2. Solve subtraction word problems.</p> <p>Day 5: 1. Use counting up (Frog) to find change from £100. 2. Use counting up (Frog) to find the difference between 4-digit prices. 3. Check subtraction by using addition.</p>	<p>Decimals and subtraction</p> <p>Day 1: Compare measures with different numbers of decimal places.</p> <p>Day 2: Investigate recurring decimals and rounding errors on a calculator.</p> <p>Day 3: same for Y6.</p> <p>Day 4: same for Y6.</p> <p>Day 5: same for Y6.</p>	<p>Day 1: 1. Understand place value in numbers with 3 decimal places. 2. Convert between kilograms and grams, litres and millilitres, metres and kilometres. 3. Compare and order numbers with 1, 2 or 3 decimal places and place on a line.</p> <p>Day 2: 1. Convert fractions to decimals using a calculator, including recurring decimals.</p> <p>Day 3: 1. Use counting up (Frog) to subtract pairs of numbers with two decimal places.</p> <p>Day 4: 1. Use counting up (Frog) to subtract numbers with different numbers of decimal places (1 or 2). 2. Solve subtraction word problems.</p> <p>Day 5: 1. Use counting up (Frog) to find change from £100. 2. Solve problems involving addition and subtraction of money.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
11	<p>Multiplication and Fractions</p> <p>Day 1: Use long multiplication to multiply pairs of 2-digit numbers together where one < 30.</p> <p>Day 2: Use long multiplication to multiply pairs of 2-digit numbers together where one number is less than 30.</p> <p>Day 3: Use long multiplication to multiply a 3-digit number by a 2-digit number less than 30; Use rounding to estimate answers.</p> <p>Day 4: Revise multiplying fractions by whole numbers; simplify answers.</p> <p>Day 5: Multiply mixed numbers by whole numbers.</p>	<p>Day 1: 1. Use long multiplication to multiply pairs of 2-digit numbers together where one < 30.</p> <p>Day 2: 1. Use long multiplication to multiply pairs of 2-digit numbers together where one < 30.</p> <p>Day 3: 1. Use long multiplication to multiply a 3-digit number by a 2-digit number less than 30. 2. Use rounding to estimate answers.</p> <p>Day 4: 1. Multiply fractions by whole numbers. 2. Simplify fraction answers.</p> <p>Day 5: 1. Multiply mixed numbers by whole numbers. 2. Use brackets.</p>	<p>Multiplication and Fractions</p> <p>Day 1: Describe and predict patterns.</p> <p>Day 2: Describe and predict patterns.</p> <p>Day 3: Make and test predictions.</p> <p>Day 4: Read recurring displays on a calculator; Convert fractions to decimals using a calculator.</p> <p>Day 5: Convert fractions to decimals using a calculator.</p>	<p>Day 1: 1. Describe and predict patterns.</p> <p>Day 2: 1. Describe and predict patterns.</p> <p>Day 3: 1. Make and test predictions.</p> <p>Day 4: 1. Read recurring displays on a calculator. 2. Convert fractions to decimals using a calculator. 3. Know common fraction and decimal equivalents</p> <p>Day 5: 1. Convert fractions to decimals using a calculator.</p>

Week	Y5: Main focus of teaching/activities	Outcomes	Y6: Main focus of teaching/activities	Outcomes
12	<p>Addition and subtraction, Multiplication and Division</p> <p>Day 1: Revise column addition of whole numbers, decimals and money.</p> <p>Day 2: Revise column subtraction of whole numbers and counting up (Frog) to subtract decimals including money; choose a method.</p> <p>Day 3: Revise short division of 4-digit numbers, expressing remainders as fractions.</p> <p>Day 4: Solve single and multi-step problems, working out which calculation(s) are necessary.</p> <p>Day 5: Understand and use equivalence.</p>	<p>Day 1: 1. Use column addition to add 4- and 5-digit whole numbers, decimals and money.</p> <p>Day 2: 1. Use column subtraction of whole numbers and counting up (Frog) to subtract decimals including money. 2. Choose which method to use.</p> <p>Day 3: 1. Use short division to divide 4-digit numbers, expressing remainders as fractions.</p> <p>Day 4: 1. Solve single and multi-step problems, working out which calculation(s) are necessary.</p> <p>Day 5: 1. Work out missing numbers in equations and write their own equations.</p>	<p>Addition and subtraction, Multiplication and Division</p> <p>Day 1: same for Y6.</p> <p>Day 2: same for Y6.</p> <p>Day 3: Interpret a rounding error, e.g. 6.9999999 as 7, Read recurring displays e.g. 0.3333333 and know that it represents a third.</p> <p>Day 4: same for Y6.</p> <p>Day 5: Use the memory button on a calculator.</p>	<p>Day 1: 1. Use column addition to add 4- and 5-digit whole numbers, decimals and money.</p> <p>Day 2: 1. Use column subtraction of whole numbers and counting up (Frog) to subtract decimals including money. 2. Choose which method to use.</p> <p>Day 3: 1. Interpret a rounding error, e.g. 6.9999999 as 7 on calculators. 2. Read recurring displays e.g. 0.3333333 and know that it represents a third.</p> <p>Day 4: 1. Solve single and multi-step problems, working out which calculation(s) are necessary.</p> <p>Day 5: 1. Use the Ac/CE buttons on a calculator. 2. Begin to use the memory (M+, M- and MR) keys.</p>

Title of topic – colour code (see below)

GREEN – Place Value or number

ORANGE – Addition or subtraction

PURPLE – Multiplication or division (inc. scaling or square/cube numbers or multiples and factors...)

GREY – Fractions or decimals or percentages or ratio

BLUE – shape or measures or data

BROWN – Algebra

The Hamilton plans do provide resources for practice of the relevant algorithms, skills and the reinforcement of crucial understandings. However, some teachers may prefer to use textbooks as an additional source of practice. We have agreed with Pearson, the publisher of Abacus, that we can reference the Abacus textbooks and that they will do a special deal if any Hamilton users wish to purchase a set of these textbooks. These are new books, written specifically to match the new National Curriculum. Any schools wishing to follow this up should go to this webpage:

<http://www.pearsonschooolsandfecolleges.co.uk/Primary/GlobalPages/AbacusFriendsofHamiltonTrust/SpecialOfferforFriendsofHamiltonTrust.aspx>