

Medium term Plans for Spring Year 4

Week	Main focus of teaching and activities each day	Starter	Outcomes of each day
1	<p>Number, place value and money</p> <p>Day 1: Divide 2-digit numbers by 10 to create 1-place decimal numbers</p> <p>Day 2: Recognise decimal and fraction forms of tenths</p> <p>Day 3: Relate fractions to decimals ($0.1 \equiv 1/10$)</p> <p>Day 4: Relate one place decimals to cm and mm</p> <p>Day 5: Compare one place decimal numbers</p>	<p>Day 1: Starter – \div multiples of 10 by 10</p> <p>Day 2: Starter – Count in $\frac{1}{4}$s</p> <p>Day 3: Starter – Count in $\frac{1}{10}$s to at least 2</p> <p>Day 4: Starter – Count on/back in steps of 10 to/from 4-digit numbers</p> <p>Day 5: Starter – Tell the time to the nearest 5 minutes</p>	<p>Number, place value and money</p> <p>Day 1: Outcomes: 1. Understand that when we divide by 10, digits shift one place to the right. 2. Understand what each digit represents in a number with one decimal place.</p> <p>Day 2: Outcomes: 1. Understand that when we multiply by 10, digits shift one place to the left. 2. Understand what each digit represents in a number with one decimal place.</p> <p>Day 3: Outcomes: 1. Recognise decimal and fraction forms of tenths.</p> <p>Day 4: Outcomes: 1. Place one-place decimals on a number line. 2. Round tenths to nearest whole.</p> <p>Day 5: Outcomes: 1. Compare 1-place decimals and write one in between, e.g. 2.1 and 1.2 and say what whole number comes between these two.</p>
2	<p>Written addition and subtraction</p> <p>Day 1: Add amounts of money using expanded and compact addition</p> <p>Day 2: Add amounts of money using expanded and compact addition</p> <p>Day 3: Count up to solve 3-digit subtractions</p> <p>Day 4: Count up to find change from £5 and £10</p> <p>Day 5: Count up to find a price difference</p>	<p>Day 1: Starter – Add any pair of 2-digit numbers</p> <p>Day 2: Starter – Use place value to add/subtract</p> <p>Day 3: Starter – Complements to next 100</p> <p>Day 4: Starter – Change from £1</p> <p>Day 5: Starter – 6 times table</p>	<p>Written addition and subtraction</p> <p>Day 1: Outcomes: 1. Use compact addition to add amounts of money with one 'carry', e.g. £3.25 + £2.68 2. Use rounding to estimate the total before carrying out the addition</p> <p>Day 2: Outcomes: 1. Use compact addition to add amounts of money with two 'carries', e.g. £3.45 + £2.68 2. Use rounding to estimate the total before carrying out the addition</p> <p>Day 3: Outcomes: 1. Use counting up to subtract 3-digit numbers, e.g. 414 – 278</p> <p>Day 4: Outcomes: 1. Find the change from £5 and from £10</p> <p>Day 5: Outcomes: 1. Find a difference between prices, e.g. £4.24 and £3.78</p>

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3	<p>Written addition and mental subtraction</p> <p>Day 1: Add three 2-digit numbers using compact addition</p> <p>Day 2: Add four 2-digit numbers using compact addition</p> <p>Day 3: Subtract 3-digit numbers using expanded column subtraction</p> <p>Day 4: Subtract 3-digit numbers choosing an efficient method</p> <p>Day 5: Investigate patterns when subtracting 3-digit numbers</p>	<p>Day 1: Starter – Add 4 single-digit numbers</p> <p>Day 2: Starter – Add 4 multiples of 10</p> <p>Day 3: Starter – Subtract multiples of 10</p> <p>Day 4: Starter – Round 3-digit numbers to the nearest 10 or 100</p> <p>Day 5: Starter – Say what calculation is necessary to solve word problems</p>	<p>Written addition and mental subtraction</p> <p>Day 1: Outcomes: 1. Use compact addition to add three 2-digit numbers 2. Use rounding to estimate totals</p> <p>Day 2: Outcomes: 1. Use compact addition to add four 2-digit numbers 2. Use rounding to estimate totals</p> <p>Day 3: Outcomes: 1. Use expanded decomposition to subtract pairs of 3-digit numbers (two carries’) 2. Check subtraction with addition</p> <p>Day 4: Outcomes: 1. Use expanded decomposition to subtract pairs of 3-digit numbers (two carries’) 2. Choose counting up or decomposition to solve subtractions</p> <p>Day 5: Outcomes: 1. Subtract any pair of 3-digit numbers using written or mental method 2. Identify and describe patterns; test out ideas</p>
4	<p>MEASURES/DATA Length, weight, bar charts</p> <p>Day 1: Measure in m and cm; convert from cm to m and m & cm to m</p> <p>Day 2: Measure in cm/mm; convert from mm to cm</p> <p>Day 3: Weigh in Kg/g; convert from kg to g and vice versa</p> <p>Day 4: Estimate weights and order items by weight; display information on a bar graph</p> <p>Day 5: Measure weights or lengths using SI units; display results on a bar graph</p>	<p>Day 1: Starter – Convert units of measurement</p> <p>Day 2: Starter – Numbers with 1 dp</p> <p>Day 3: Starter – Mark 0.1s on a line</p> <p>Day 4: Starter – Convert between units of measurements</p> <p>Day 5: Starter – Place numbers on empty lines of different lengths</p>	<p>MEASURES/DATA Length, weight, bar charts</p> <p>Day 1: Outcomes: 1. Measure lengths in m and cm and record using a decimal point 2. Convert cm into m</p> <p>Day 2: Outcomes: 1. Measure lengths in cm and mm to one decimal place 2. Convert lengths from km to m and mm to cm</p> <p>Day 3: Outcomes: 1. Use weight benchmarks to assist with estimating 2. Weigh items in g and kg to the nearest 100g 3. Convert from kg to g and from g to kg</p> <p>Day 4: Outcomes: 1. Estimate the order of weights 2. Read scales to one decimal place 3. Record results in a bar graph</p> <p>Day 5: Outcomes: 1. Choose appropriate units of measurement to measure objects 2. Collect, record and interpret data in a bar graph, choosing a suitable scale</p>

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5	<p>FRACTIONS</p> <p>Day 1: Identify equivalent fractions, especially in relation to halves and quarters</p> <p>Day 2: Simplify fractions by reducing to their simplest form</p> <p>Day 3: Identify equivalent fractions and mark on a number line</p> <p>Day 4: Mark equivalent fractions/decimals on a number line</p> <p>Day 5: Add fractions with the same denominator</p>	<p>Day 1: Starter – Halve any 2-digit number</p> <p>Day 2: Starter – Count in steps of $\frac{1}{4}$</p> <p>Day 3: Starter – Count in steps of $\frac{1}{3}$</p> <p>Day 4: Starter – Count in steps of 0.1</p> <p>Day 5: Starter – Fractions with total of 1</p>	<p>FRACTIONS</p> <p>Day 1: Outcomes: 1. Identify fractions equivalent to one half including halves and eighths 2. Identify fractions equivalent to one quarter</p> <p>Day 2: Outcomes: 1. Identify equivalent fractions up to twelfths with a supporting image 2. Reduce fractions to their simplest form</p> <p>Day 3: Outcomes: 1. Identify equivalent fifths, tenths and halves and mark them on a line 2. Reduce fractions to their simplest form</p> <p>Day 4: Outcomes: 1. Identify equivalent fractions and decimals (0.1s, 1/10s and 1/2s)</p> <p>Day 5: Outcomes: 1. Add and subtract fractions with the same denominators with 2 wholes using a fraction line</p>
6	<p>Number, place value and money</p> <p>Day 1: Multiply and divide by 10 and 100 using 1-place decimals</p> <p>Day 2: Multiply multiples of 10 and 100 by single-digit numbers</p> <p>Day 3: Add and subtract 0.1 and 1 to/from numbers with one decimal place</p> <p>Day 4: Use negative numbers in context of temperature</p> <p>Day 5: Place negative numbers on a line; Order positive and negative numbers</p>	<p>Day 1: Starter – Convert between kg & g, km & m l & ml</p> <p>Day 2: Starter – Convert cm to mm</p> <p>Day 3: Starter – Place decimals on a 0.1 line</p> <p>Day 4: Starter – Compare pairs of 4-digit numbers and give one between</p> <p>Day 5: Starter – +/- 1, 10, 100 or 1000</p>	<p>Number, place value and money</p> <p>Day 1: Outcomes: 1. Multiply and divide by 10 and 100 (whole answers or with 1dp)</p> <p>Day 2: Outcomes: 1. Multiply multiples of 10 and 100 by single-digit numbers</p> <p>Day 3: Outcomes: 1. Add and subtract 0.1 and 1 to/from numbers with one decimal place</p> <p>Day 4: Outcomes: 1. Use negative numbers in context of temperature</p> <p>Day 5: Outcomes: 1. Place negative numbers on a line 2. Order positive and negative numbers</p>

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7	<p>Written addition and mental subtraction</p> <p>Day 1: Add/subtract single-digit numbers to and from 3 and 4-digit numbers</p> <p>Day 2: Subtract single-digit numbers from 3 and 4-digit numbers</p> <p>Day 3: Add multiples of 10, 100 and 1000</p> <p>Day 4: Subtract multiples of 10, 100 and 1000</p> <p>Day 5: Add and subtract multiples of 10, 100 and 1000</p>	<p>Day 1: Starter – Count on/back in steps of 1</p> <p>Day 2: Starter – Add 1, 10, 100, 1000</p> <p>Day 3: Starter – Count on/back in steps of 100</p> <p>Day 4: Starter – Count/back in steps of 100</p> <p>Day 5: Starter – 6 times table</p>	<p>Written addition and mental subtraction</p> <p>Day 1: Outcomes: 1. Add single-digit numbers to four-digit numbers, bridging multiples of 10, 100 and 1000</p> <p>Day 2: Outcomes: 1. Subtract single-digit numbers from four-digit numbers, bridging multiples of 10, 100 and 1000</p> <p>Day 3: Outcomes: 1. Add multiples of 10, 100 and 1000 to four-digit numbers, crossing 10s, 100s but not crossing 10,000</p> <p>Day 4: Outcomes: 1. Subtract multiples of 10, 100 and 1000 from four-digit numbers, crossing 10s and 100s</p> <p>Day 5: Outcomes: 1. Understand inverse operations, how subtraction 'undoes' addition for example</p>
8	<p>Written addition and mental subtraction</p> <p>Day 1: Add three 3-digit numbers using compact addition</p> <p>Day 2: Use compact addition to add amounts of money</p> <p>Day 3: Use expanded decomposition to subtract three-digit numbers</p> <p>Day 4: Introduce compact decomposition to subtract three-digit numbers</p> <p>Day 5: Use compact decomposition to subtract three-digit numbers</p>	<p>Day 1: Starter – 8 times table</p> <p>Day 2: Starter – Add three multiples of 10</p> <p>Day 3: Starter – Add 2-digit numbers</p> <p>Day 4: Starter – Subtract 2-digit numbers</p> <p>Day 5: Starter – Order +ve and –ve numbers</p>	<p>Written addition and mental subtraction</p> <p>Day 1: Outcomes: 1. Use compact addition to add three 3-digit numbers 2. Approximate the answer first</p> <p>Day 2: Outcomes: 1. Use compact addition to add amounts of money 2. Approximate the answer first</p> <p>Day 3: Outcomes: 1. Subtract pairs of three-digit numbers using expanded decomposition (one 'carry')</p> <p>Day 4: Outcomes: 1. Subtract pairs of three-digit numbers using expanded or compact decomposition (one 'carry')</p> <p>Day 5: Outcomes: 1. Subtract any pair of three-digit numbers using expanded or compact decomposition (two 'carries')</p>

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9	<p>MEASURES/SHAPE Time, position and direction</p> <p>Day 1: Tell time on digital and analogue clocks using 24 hour clock</p> <p>Day 2: Convert 24 hour clock to am and pm times</p> <p>Day 3: Use timetables and calculate intervals</p> <p>Day 4: Use x, y co-ordinates on a graph (first quadrant)</p> <p>Day 5: Use x, y co-ordinates to draw shapes in first quadrant</p>	<p>Day 1: Starter – Tell Time on analogue clock</p> <p>Day 2: Starter – Convert analogue times to digital</p> <p>Day 3: Starter – Find time a number of minutes later</p> <p>Day 4: Starter – Convert from 24 hour clock to 12-hour am/pm</p> <p>Day 5: Starter – Roman numerals</p>	<p>MEASURES/SHAPE Time, position and direction</p> <p>Day 1: Outcomes: 1. Tell the time on an analogue clock using am and pm 2. Begin to use 24-hour clock and recognise matching times</p> <p>Day 2: Outcomes: 1. Convert analogue times into digital 2. Convert 24-hour times into 12-hour am/pm times</p> <p>Day 3: Outcomes: 1. Calculate time intervals using 24-hour clock, crossing the hour 2. Read and work out time intervals on a 24-hour timetable</p> <p>Day 4: Outcomes: 1. Plot and write co-ordinates in the first quadrant 2. Complete polygons by giving missing points</p> <p>Day 5: Outcomes: 1. Describe translations of shapes on a grid and write new co-ordinates</p>
10	<p>Mental multiplication and division</p> <p>Day 1: Know multiplication and division facts for the 9 times table</p> <p>Day 2: Begin to know multiplication and division facts for the 7 times table</p> <p>Day 3: Revise all times tables up to 12×12</p> <p>Day 4: Find factors of numbers up to 40</p> <p>Day 5: Use tables facts and place value to multiply multiples of 10 and 100 by single-digit numbers</p>	<p>Day 1: Starter – Division facts for the 6 times table</p> <p>Day 2: Starter – Division facts for the 8 times table</p> <p>Day 3: Starter – 7 times table</p> <p>Day 4: Starter – 9 times table</p> <p>Day 5: Starter – Count in steps of 40</p>	<p>Mental multiplication and division</p> <p>Day 1: Outcomes: 1. Know multiplication and division facts for the 9 times table</p> <p>Day 2: Outcomes: 1. Begin to know multiplication and division facts for the 7 times table 2. Use commutativity and known facts to derive new multiplication facts</p> <p>Day 3: Outcomes: 1. Know most multiplication facts up to 12 and use commutativity and known facts to derive others</p> <p>Day 4: Outcomes: 1. Find factors of numbers up to 40</p> <p>Day 5: Outcomes: 1. Multiply single-digit numbers by multiples of 10 and 100</p>

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11	<p>Written multiplication and division</p> <p>Day 1: Use partitioning to multiply 3-digit numbers by 1-digit numbers</p> <p>Day 2: Use partitioning to multiply 3-digit numbers by 1-digit numbers</p> <p>Day 3: Use partitioning to multiply 3-digit numbers by 1-digit numbers</p> <p>Day 4: Know the 11 and 12 times</p> <p>Day 5: Divide 2-digit numbers by single-digit numbers (with remainders)</p>	<p>Day 1: Starter – Find remainders after division</p> <p>Day 2: Starter – 6 and 60 times table</p> <p>Day 3: Starter – 7 and 70 times tables</p> <p>Day 4: Starter – 9 and 90 times tables</p> <p>Day 5: Starter – 12 times table</p>	<p>Written multiplication and division</p> <p>Day 1: Outcomes: 1. Use the grid method to multiply 3-digit numbers by single-digit numbers</p> <p>Day 2: Outcomes: 1. Use partitioning to multiply 3-digit numbers by single-digit numbers (grid or ladder layout)</p> <p>Day 3: Outcomes: 1. Use partitioning to multiply 3-digit numbers by single-digit numbers (grid or ladder layout) 2. Use rounding to approximate an answer</p> <p>Day 4: Outcomes: 1. Know the 11 and 12 times tables</p> <p>Day 5: Outcomes: 1. Divide 2-digit numbers by single-digit remainders, including those divisions which give a remainder (answers between 10 and 30)</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.pearsonschoolsandfecolleges.co.uk/Primary/GlobalPages/AbacusFriendsofHamiltonTrust/SpecialOfferforFriendsofHamiltonTrust.aspx>