Medium term Plans for Spring Year 4

Subject to change as the weeks go on to suit the needs of the children

Week	Main focus of teaching and activities each day	Starter	Outcomes of each day
1	**Number, place value and money** **Day 1:** Divide 2-digit numbers by 10 to create 1-place decimal numbers. **Day 2**: Multiply 1-place decimals to give whole numbers. **Day 3:** Relate fractions to decimals (0.1 ≡ 1/10). **Day 4:** Relate one place decimals to cm and mm. **Day 5:** Compare one place decimal numbers.	**Day 1:** Starter – ÷ multiples of 10 by 10 **Day 2:** Starter – Count in ¼s **Day 3:** Starter – Count in 1/10s to at least 2 **Day 4:** Starter – Count on/back in steps of 10 to/from 4-digit numbers **Day 5:** Starter – Tell the time to the nearest 5 minutes	**Number, place value and money** **Day 1:** 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 1 decimal place. **Day 2:** 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 1 decimal place. **Day 3:** 1. Recognise decimal and fraction forms of tenths. **Day 4:** 1. Place one-place decimals on a number line. 2. Round tenths to nearest whole. **Day 5:** 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. **HAT Outcomes 26, 27, 29 (÷ by 10), 31 (1dp) and 33 (cm & mm)**
2	**Written addition and subtraction** **Day 1:** Add amounts of money using expanded and compact addition. **Day 2**: Add amounts of money using expanded and compact addition. **Day 3:** Count up to solve 3-digit subtractions. **Day 4:** Count up to find change from £5 and £10. **Day 5:** Count up to find a price difference.	**Day 1:** Starter – Add any pair of 2-digit numbers **Day 2:** Starter – Use place value to add/subtract **Day 3:** Starter – Complements to next 100 **Day 4:** Starter – Change from £1 **Day 5:** Starter – 6 times table	**Written addition and subtraction** **Day 1:** 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. **Day 2:** 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. **Day 3:** 1. Use counting up to subtract 3-digit numbers, e.g. 414 – 278. **Day 4::** 1. Find the change from £5 and from £10. **Day 5:** 1. Find a difference between prices, e.g. £4.24 and £3.78. **HAT Outcomes 11, 12, 15, 32 (money calculations) and 36**

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3	*Written addition and mental subtraction* **Day 1:** Add three 2-digit numbers using compact addition. **Day 2**: Add four 2-digit numbers using compact addition. **Day 3:** Subtract 3-digit numbers using expanded column subtraction. **Day 4:** Subtract 3-digit numbers choosing an efficient method. **Day 5:** Investigate patterns when subtracting 3-digit numbers.	**Day 1:** Starter – Add 4 single-digit numbers **Day 2**: Starter – Add 4 multiples of 10 **Day 3:** Starter – Subtract multiples of 10 **Day 4:** Starter – Round 3-digit numbers to the nearest 10 or 100 **Day 5:** Starter – Say what calculation is necessary to solve word problems	*Written addition and mental subtraction* **Day 1:** 1. Use compact addition to add three 2-digit numbers 2. Use rounding to estimate totals. **Day 2:** 1. Use compact addition to add four 2-digit numbers. 2. Use rounding to estimate totals. **Day 3:** 1. Use expanded decomposition to subtract pairs of 3-digit numbers (two carries'). 2. Check subtraction with addition. **Day 4:** 1. Use expanded decomposition to subtract pairs of 3-digit numbers (two carries'). 2. Choose counting up or decomposition to solve subtractions. **Day 5:** 1. Subtract any pair of 3-digit nos using written or mental method. 2. Identify and describe patterns; test out ideas. **HAT Outcomes 11 (3-digit nos), 12, 14 (3-digit nos) and 15**
4	*MEASURES/DATA Length, weight, bar charts* **Day 1:** Measure in m and cm; convert from cm to m and m & cm to m. **Day 2**: Measure in cm/mm; convert from mm to cm. **Day 3:** Weigh in Kg/g; convert from kg to g and vice versa. **Day 4:** Estimate weights and order items by weight; display information on a bar graph. **Day 5:** Measure weights or lengths using SI units; display results on a bar graph.	**Day 1:** Starter – Convert units of measurement **Day 2**: Starter – Numbers with 1 dp **Day 3:** Starter – Mark 0.1s on a line **Day 4:** Starter – Convert between units of measurements **Day 5:** Starter – Place numbers on empty lines of different lengths	*MEASURES/DATA Length, weight, bar charts* **Day 1:** 1. Measure lengths in m and cm and record using a decimal point. 2. Convert cm into m. **Day 2:** 1. Measure lengths in cm and mm to one decimal place. 2. Convert lengths from km to m and mm to cm. **Day 3:** 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. **Day 4:** 1. Estimate the order of weights. 2. Read scales to one decimal place. 3. Record results in a bar graph. **Day 5:** 1. Choose appropriate units of measurement to measure objects. 2. Collect, record & interpret data in a bar graph, choosing a suitable scale. **HAT Outcomes 33 (length and weight), 36 and 38**

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5	*FRACTIONS* **Day 1:** Identify equivalent fractions, especially in relation to halves and quarters. **Day 2**: Simplify fractions by reducing to their simplest form. **Day 3:** Identify equivalent fractions and mark on a number line. **Day 4:** Mark equivalent fractions/decimals on a number line. **Day 5:** Add fractions with the same denominator.	**Day 1:** Starter – Halve any 2-digit number **Day 2**: Starter – Count in steps of ¼ **Day 3:** Starter – Count in steps of 1/3 **Day 4:** Starter – Count in steps of 0.1 **Day 5:** Starter – Fractions with total of 1	*FRACTIONS* **Day 1:** 1. Identify fractions equivalent to one half including quarters and eighths. 2. Identify fractions equivalent to one quarter. **Day 2:** 1. Identify equivalent fractions up to twelfths with a supporting image. 2. Reduce fractions to their simplest form. **Day 3:** 1. Identify equivalent fifths, tenths and halves and mark them on a line. 2. Reduce fractions to their simplest form. **Day 4:** 1. Identify equivalent fractions and decimals (0.1s, 1/10s and 1/2s). **Day 5:** 1. Add and subtract fractions with the same denominators with 2 wholes using a fraction line. **HAT Outcomes 23 and 25**
6	*Number, place value and money* **Day 1:** Multiply and divide by 10 and 100 using 1-place decimals. **Day 2**: Multiply multiples of 10 and 100 by single-digit numbers. **Day 3:** Add and subtract 0.1 and 1 to/from numbers with one decimal place. **Day 4:** Use negative numbers in context of temperature. **Day 5:** Place negative numbers on a line; Order positive and negative numbers.	**Day 1:** Starter – Convert between kg &g, km & m l & ml **Day 2**: Starter – Convert cm to mm **Day 3:** Starter – Place decimals on a 0.1 line **Day 4:** Starter – Compare pairs of 4-digit numbers and give one between **Day 5:** Starter – +/- 1, 10, 100 or 1000	*Number, place value and money* **Day 1:** 1. Multiply and divide by 10 and 100 (whole answers or with 1dp). **Day 2**: 1. Multiply multiples of 10 and 100 by single-digit numbers. **Day 3:** 1. Add and subtract 0.1 and 1 to/from numbers with one decimal place. **Day 4:** 1. Use negative numbers in context of temperature. **Day 5:** 1. Place negative numbers on a line. 2. Order positive and negative numbers. **HAT Outcomes 5, 7, 9, 29 and 30**

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7	**Written addition and mental subtraction** **Day 1:** Add/subtract single-digit numbers to and from 3 and 4-digit numbers. **Day 2:** Subtract single-digit numbers from 3 and 4-digit numbers. **Day 3:** Add multiples of 10, 100 and 1000. **Day 4:** Subtract multiples of 10, 100 and 1000. **Day 5:** Add and subtract multiples of 10, 100 and 1000.	**Day 1:** Starter – Count on/back in steps of 1 **Day 2:** Starter – Add 1, 10, 100, 1000 **Day 3:** Starter – Count on/back in steps of 100 **Day 4:** Starter – Count/back in steps of 100 **Day 5:** Starter – 6 times table	**Written addition and mental subtraction** **Day 1:** 1. Add single-digit numbers to four-digit numbers, bridging multiples of 10, 100 and 1000. **Day 2:** 1. Subtract single-digit numbers from four-digit numbers, bridging multiples of 10, 100 and 1000. **Day 3:** 1. Add multiples of 10, 100 and 1000 to four-digit numbers, crossing 10s, 100s but not crossing 10,000. **Day 4:** 1. Subtract multiples of 10, 100 and 1000 from four-digit numbers, crossing 10s and 100s. **Day 5:** 1. Understand inverse operations, how subtraction 'undoes' addition for example. **HAT Outcomes 6, 9, 15 and 16**
8	**Written addition and subtraction** **Day 1:** Add three 3-digit numbers using compact addition. **Day 2:** Use compact addition to add amounts of money. **Day 3:** Use expanded decomposition to subtract three-digit numbers. **Day 4:** Introduce compact decomposition to subtract three-digit numbers. **Day 5:** Use compact decomposition to subtract three-digit numbers.	**Day 1:** Starter – 8 times table **Day 2:** Starter – Add three multiples of 10 **Day 3:** Starter – Add 2-digit numbers **Day 4:** Starter – Subtract 2-digit numbers **Day 5:** Starter – Order +ve and –ve numbers	**Written addition and subtraction** **Day 1:** 1. Use compact addition to add three 3-digit numbers. 2. Approximate the answer first. **Day 2:** 1. Use compact addition to add amounts of money. 2. Approximate the answer first. **Day 3:** 1. Subtract pairs of three-digit numbers using expanded decomposition (one 'carry'). **Day 4:** 1. Subtract pairs of three-digit numbers using expanded or compact decomposition (one 'carry'). **Day 5:** 1. Subtract any pair of three-digit numbers using expanded or compact decomposition (two 'carries'). **HAT outcomes 11 (3-digit nos), 14 (3-digit nos) and 15**

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9	**MEASURES/SHAPE Time, position and direction** **Day 1:** Tell time on digital and analogue clocks using 24 hour clock. **Day 2**: Convert 24 hour clock to am and pm times. **Day 3:** Use timetables and calculate intervals. **Day 4:** Use x, y co-ordinates on a graph (first quadrant). **Day 5:** Use x, y co-ordinates to draw shapes in first quadrant.	**Day 1:** Starter – Tell Time on analogue clock **Day 2**: Starter – Convert analogue times to digital **Day 3:** Starter – Find time a number of minutes later **Day 4:** Starter – Convert from 24 hour clock to 12-hour am/pm **Day 5:** Starter – Roman numerals	**MEASURES/SHAPE Time, position and direction** **Day 1:** 1. Tell the time on an analogue clock using am and pm. 2. Begin to use 24-hour clock and recognise matching times. **Day 2:** 1. Convert analogue times into digital. 2. Convert 24-hour times into 12-hour am/pm times. **Day 3:** 1. Calculate time intervals using 24-hour clock, crossing the hour. 2. Read and work out time intervals on a 24-hour timetable. **Day 4:** 1. Plot and write co-ordinates in the first quadrant. 2. Complete polygons by giving missing points. **Day 5:** 1. Describe translations of shapes on a grid and write new co-ordinates. **HAT outcomes 33 (time), 37, 42 and 43**
10	**Mental multiplication and division** **Day 1:** Know multiplication and division facts for the 9 times table. **Day 2**: Begin to know multiplication and division facts for the 7 times table. **Day 3:** Revise all times tables up to 12 × 12. **Day 4:** Find factors of numbers up to 40. **Day 5:** Use tables facts and place value to multiply multiples of 10 and 100 by single-digit numbers.	**Day 1:** Starter – Division facts for the 6 times table **Day 2**: Starter – Division facts for the 8 times table **Day 3:** Starter – 7 times table **Day 4:** Starter – 9 times table **Day 5:** Starter – Count in steps of 40	**Mental multiplication and division** **Day 1:** 1. Know multiplication and division facts for the 9 times table. **Day 2:** 1. Begin to know multiplication and division facts for the 7 times table. 2. Use commutativity and known facts to derive new multiplication facts. **Day 3:** 1. Know most multiplication facts up to 12 and use commutativity and known facts to derive others. **Day 4:** 1. Find factors of numbers up to 40. **Day 5:** 1. Multiply single-digit numbers by multiples of 10 and 100. **HAT outcomes 17 and 18**

Week	Main focus of teaching and activities each day	Starter	Outcomes of each day
11	*Written multiplication and division* **Day 1:** Use partitioning to multiply 3-digit numbers by 1-digit numbers. **Day 2**: Use partitioning to multiply 3-digit numbers by 1-digit numbers. **Day 3:** Use partitioning to multiply 3-digit numbers by 1-digit numbers. **Day 4:** Know the 11 and 12 times. **Day 5:** Divide 2-digit numbers by single-digit numbers (with remainders).	**Day 1:** Starter – Find remainders after division **Day 2**: Starter – 6 and 60 times table **Day 3:** Starter – 7 and 70 times tables **Day 4:** Starter – 9 and 90 times tables **Day 5:** Starter – 12 times table	*Written multiplication and division* **Day 1:** 1. Use the grid method to multiply 3-digit numbers by single-digit numbers. **Day 2:** 1. Use partitioning to multiply 3-digit numbers by single-digit numbers (grid or ladder layout). **Day 3:** 1. Use partitioning to multiply 3-digit numbers by single-digit numbers (grid or ladder layout). 2. Use rounding to approximate an answer. **Day 4:** 1. Know the 11 and 12 times tables. **Day 5:** 1. Divide 2-digit numbers by single-digit remainders, including those divisions which give a remainder (answers between 10 and 30). **HAT outcomes 17, 19 and 20**

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

OUTCOMES FOR Y4

Key Outcomes in bold

1. **Locate 4-digit numbers on a landmarked line and use this to compare and order numbers.** N
2. **Round to ten, a hundred and a thousand.** N
3. **Understand the numbers of 1s, 10s, 100s, 1000s in a 4-digit number and the use of zero as a place holder.** N
4. Count in multiples of 6, 7, 9, 25 and 1000. N
5. Recognise negative numbers in relation to number lines and temperature. N
6. Add multiples of 1, 10, 100, 1000 without difficulty, e.g. 5,347 + 3000, 434 + 300 and 648 – 220. N
7. **Multiply 1 and 2 digit whole numbers by 10, 100 and 1000.** N
8. Read Roman numerals to 100 (I to C). N
9. Solve number and practical problems involving place value. N
10. **Mentally add and subtract any pair of two digit numbers or 3-digit multiples of 10.** AS
11. **Use column addition to add 3-digit and 4-digit numbers: first expanded, then compact method.** AS
12. **Subtract numbers from 3-digit numbers using 'Frog' and counting up, e.g. 426 – 278, 321 - 87.** AS
13. Use 'Frog' to subtract from multiples of 1000 where the difference is less than 500. AS
14. Use column subtraction to subtract 3-digit and 4-digit numbers: first expanded, then compact method. AS
15. **Estimate and use inverse operations to check answers to a calculation**. AS
16. **Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.** AS
17. **Know and recite times tables, including division facts, up to 12 × 12; multiply by 0 and multiply and divide by 1.** MD
18. Use known facts, place value, factors and commutativity to multiply and divide mentally, including multiplying three numbers together. MD
19. **Multiply 1-digit numbers by 2-digit or 'friendly' 3-digit numbers mentally or using grid method (i.e. using the distributive law).** MD
20. **Know how to use 'efficient chunking' for division above the range of the tables facts, e.g. 84 ÷ 6 = ? Begin to extend this to 3 digit numbers.** MD
21. Solve single-step problems and begin to solve multi-step problems which include multiplication or division. MD
22. Solve scaling problems and harder correspondence problems such as n objects are connected to m objects. MD
23. **Write the equivalent fraction for fractions with given denominators or numerators, e.g. ½ = ?/8; reduce a fraction to its simplest form, e.g. 6/12 ≡ ½.** FD
24. **Use times tables to find unit and non-unit fractions of amounts, e.g. 1/6 of 48 and 3/8 of 64.** FD
25. Add and subtract fractions with the same denominator. FD
26. **Know that one-place decimal numbers represent ones and tenths e.g. 3.7 = 3 ones and 7 tenths.** FD
27. Round decimals with one decimal place to the nearest whole number. FD
28. Recognise and write decimal equivalents of any number of tenths or hundredths and decimal equivalents to ¼, ½, ¾. FD
29. **Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.** FD
30. Count up and down in hundredths. FD

31. Compare numbers with the same number of decimal places up to two decimal places.   FD
32. Solve simple measure and money problems involving fractions and decimals to two decimal places.   FD
33. **Convert between units of measurement, e.g. cm to m, g to Kg and ml to L and units of time.** MS
34. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. MS
35. Find the area of rectilinear shapes by counting squares. MS
36. Estimate, compare and calculate different measures, including money in pounds and pence. MS
37. Convert between units of time and between analogue and digital times, and between 12-hour and 24-hour times.   MS
38. Interpret and present discreet data using bar charts, pictograms and tables, and continuous data on time graphs; answer questions re-data. MS
39. **Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.**   G
40. **Identify acute and obtuse angles, compare and order angles up to 180°.**   G
41. Identify lines of symmetry in 2-D shapes presented in different orientations; complete a simple symmetric figure with respect to one line of symmetry. G
42. Describe positions on a 2-D grid as coordinates in the first quadrant, plot specified points and draw sides to complete a given polygon G
43. Describe movements between positions as translations of a given unit to the left/right and up/down. G