**Medium term Plans for Spring Lapwing Class Years 3/4 Miss White**

| **Week** | **Y3: Main focus of teaching/activities**  | **Outcomes**  | **Y4: Main focus of teaching/activities** | **Outcomes**  |
| --- | --- | --- | --- | --- |
| 1 | **Number, place value and money****Day 1:** Revise placing three-digit numbers on a number line.**Day 2**: Place three-digit numbers between multiples of 10 on a ‘hundred’ line, e.g. from 400 to 500, round to nearest 10.**Day 3:** Partition three-digit numbers into 100s, 10s and 1s; compare and order numbers.**Day 4:** Order groups of three-digit numbers. **Day 5:** Investigate three-digit numbers. | **Day 1:** 1. Place three-digit numbers between multiples of 10 on landmarked lines.2. Round three-digit numbers to the nearest 10.**Day 2:** 1. Place three-digit numbers on a 0-1000 with 100s marked with some degree of accuracy.**Day 3:** 1. Compare 2 three-digit numbers.**Day 4:** 1. Order 3 three-digit numbers using place value.**Day 5**: 1. Solve a problem using knowledge of place value.2. Order at least 10 three three-digit numbers. | **Number, place value and money****Day 1:** Divide numbers by 10 to give 1-place decimals.**Day 2**: Multiply numbers like 3.4 and 5.6 by 10 then use function machines.**Day 3:** Place one place decimals on a number line and round to nearest whole.**Day 4:** Fractional and decimal forms of tenths (3/10 and 0.3).**Day 5:** Order numbers with 1 decimal place. | **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 one decimal place. 1. Know the number before and after any two-digit number. **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 one decimal place. **Day 3:** 1. Place one-place decimals on a number line.2. Round tenths to nearest whole.**Day 4:** 1. Recognise decimal and fraction forms of tenths.**Day 5:** 1. Solve a problem using knowledge of place value.2. Order at least 10 numbers with 1 decimal place |
| 2 | ***Mental addition and subtraction*****Day 1:** Add three two-digit numbers **Day 2**: Add pairs of two-digit numbers using different strategies **Day 3:** Subtract multiples of ten and near multiples**Day 4:** Count up to solve two-digit subtractions **Day 5:** Choose strategies to subtract | **Day 1:** 1. Add three two-digit numbers using partitioning into 10s and 1s.**Day 2**: 1. Add pairs of two-digit numbers using a variety of strategies.**Day 3:** 1. Subtract near multiples of 10 from a two-digit number.**Day 4:** 1. Subtract any two-digit number from another, using counting up. **Day 5:** 1. Select an appropriate strategy to subtract. | ***Written addition and subtraction*****Day 1:** Use compact written addition to add amounts of money.**Day 2:** Add amounts of money using expanded and compact addition.**Day 3:** Count up to solve three-digit subtractions.**Day 4:** Count up to find change from £5 and £10. **Day 5:** Count up to find a price difference.  | **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 three 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. |
| 3 | **Written addition and mental subtraction****Day 1:** Add three-digit numbers using expanded addition. **Day 2**: Add three-digit numbers using expanded addition.**Day 3:** Add three-digit numbers using expanded addition, estimate totals.**Day 4:** Subtract a two-digit number from a three-digit number using counting up (Frog).**Day 5:** Subtract a two-digit number from a three-digit number using counting up (Frog).  | **Day 1:** 1. Add two three-digit numbers using expanded addition including additions that give a 10 in the 1s column. **Day 2:** 1. Add two three-digit numbers using expanded addition including additions that give a 10 in the 1s column OR give 100 in the 10s column.**Day 3:** 1. Add two three-digit numbers using expanded addition including additions that give a 10 in the 1s column OR give 100 in the 10s column.2. Use rounding to estimate totals.**Day 4:** 1. Subtract using counting up on the empty number line.2. Use addition to check subtraction. **Day 5:** 1. Subtract using counting up on the empty number line.2. Predict whether one subtraction will have a bigger or smaller answer than another. | **Written addition and mental subtraction****Day 1:** Add three two-digit numbers using compact addition.**Day 2:** Add four two-digit numbers using compact addition.**Day 3:** Subtract three-digit numbers using expanded column subtraction.**Day 4:** Subtract three-digit numbers choosing an efficient method.**Day 5:** Investigate patterns when subtracting three-digit numbers. | **Day 1:** 1. Use compact addition to add three two-digit numbers.2. Use rounding to estimate totals. **Day 2:** 1. Use compact addition to add four two-digit numbers.2. Use rounding to estimate totals. **Day 3:** 1. Use expanded decomposition to subtract pairs of three-digit numbers (two moves).2. Check subtraction with addition**Day 4:** 1. Use expanded decomposition to subtract pairs of three-digit numbers (two moves).2. Choose counting up or decomposition to solve subtractions.**Day 5:** 1. Subtract any pair of three-digit numbers choosing a written or mental method.2. Identify and describe patterns; test out ideas. |
| 4 | **MEASURES/DATA Length, weight, bar charts** **Day 1:** Measure in m and cm; convert cm to m & vice versa. **Day 2**: Measure in cm and mm; Convert mm to cm and vice versa.**Day 3:** Measure in kg and g; Convert g to kg and vice versa.**Day 4:** Measure in kg and g; Draw a bar graph.**Day 5:** Measure in m, cm and mm, kg and g; Draw a bar graph where 1 square represents 2 units. | **Day 1:** 1. Measure lengths in m and cm and record.2. Convert cm into m and cm.**Day 2:** 1. Measure lengths in cm and mm.2. Convert lengths from cm to cm and mm.**Day 3:** 1. Establish weight benchmarks (1kg and 100g) and make estimates.**Day 4:** 1. Estimate the order of weights.2. Read scales to the nearest 100g.3. Record results in a bar graph, one square = 100g.**Day 5:** 1. Choose appropriate units of measurement to measure objects.2. Collect, record and interpret data in a bar graph when one step represents several units. | **MEASURES/DATA Length, weight, bar charts** **Day 1:** Measure in m and cm; convert from cm to m and m and cm to m (2 decimal places).**Day 2:** Measure in cm/mm; convert from mm to cm (1 decimal place).**Day 3:** Weigh in kg/g; Convert from kg to g and vice versa (1 decimal place).**Day 4:** Estimate weights and order items by weight; display information on a bar graph.**Day 5:** Draw a bar graph where 1 square represents 4 units.  | **Day 1:** 1. Measure lengths in m and cm and record using a decimal point2. Convert cm into m (2 decimal places).**Day 2:** 1. Measure lengths in cm and mm to one decimal place.2. Convert lengths from km to m and mm to cm (1 decimal place).**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 (1 decimal place).**Day 4:** 1. Estimate the order of weights2. Read scales to one decimal place3. Record results in a bar graph, one square = 0.1kg**.****Day 5:** 1. Choose appropriate units of measurement to measure objects.2. Collect, record and interpret data in a bar graph, choosing a suitable scale. |
| 5 | ***Fractions*****Day 1:** Place fractions on a number line (1/4s 1/2s, 1/8s)**Day 2**: Finding fractions of amounts (1/4s and 1/8s) **Day 3:** Finding fractions of amounts (1/3s and 1/6s)**Day 4:** Understand denominator & numerator and compare fractions**Day 5:** Recognise and find fractions with a total of 1 | **Day 1:** 1. Count in halves and quarters.2. Locate halves and quarters on a 0–10 number line.**Day 2:** 1. Understand fraction of shapes.2. Find 1/4s and 1/8s of numbers. **Day 3:** 1. Understand fraction of shapes.2. Find 1/6s of numbers. **Day 4:** 1. Understand that fractions are part of a whole.2. Understand the larger the denominator the smaller the unit fraction.**Day 5:** 1. Write additions of fractions with the same denominator with total of 1. | ***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 and subtract fractions with the same denominator. | **Day 1:** 1. Identify fractions equivalent to one half and one quarter.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, 1/5s and 1/2s).**Day 5:** 1. Add and subtract fractions with the same denominators within 2 wholes using a fraction line. |
| 6 | ***Number, place value and money*** **Day 1:** Place value in three-digit numbers including money.**Day 2**: Multiply and divide numbers by 10 using place value grids.**Day 3:** Multiplying and dividing by 10 and 100. **Day 4:** Multiply and divide by 10 and 100 using money. **Day 5:** Using inverse operations. | **Day 1:** 1. Know what each digit represents in a 3-digit amount of money.2. Use 0 as a placeholder. **Day 2:** 1. Multiply and divide by 10.2. Know how to use place value to help with multiplying and dividing.**Day 3:** 1. Multiply and divide by 10 and 100.2. Know how to use place value to help with multiplying and dividing.**Day 4:** 1. Multiply and divide amounts of money by 10 and 100.**Day 5:** 1. Understand that division ‘undoes’ multiplication.2. Multiply and divide by 10 and 1003. Perform 2-step operations. | ***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:** 1. Multiply and divide by 10 and 100 (whole answers or with 1 decimal place).**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.2. Find differences in temperature.**Day 5:** 1. Place negative numbers on a line.2. Order positive and negative numbers. |
| 7 | ***Mental addition and mental subtraction*****Day 1:** Add single-digit numbers to three-digit numbers.**Day 2**: Subtract single-digit numbers from three-digit numbers.**Day 3:** Add multiples of 10 and 100.**Day 4:** Subtract multiples of 10 and 100**Day 5:** Using addition and subtraction to solve word problems. | **Day 1:** 1. Use number facts to add a single-digit number to a 3-digit.2. Bridge 10s when adding. **Day 2:** 1. Use number facts to subtract a single-digit number from a 3-digit.2. Bridge 10s when subtracting.**Day 3:** 1. Add multiples of 10 and 100 to three-digit numbers, crossing the 10s and 100s barriers.**Day 4:** 1. Subtract multiples of 10 and 100 from three-digit numbers, crossing the 10s and 100s barriers.**Day 5:** 1. Know what calculation to perform in order to solve a word problem. | ***Written addition and mental subtraction*****Day 1:** Add single-digit numbers to three and four-digit numbers.**Day 2:** Subtract single-digit numbers from 3 and four-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:** 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. |
| 8 | ***Written addition and mental subtraction*****Day 1:** Use expanded addition to add two three-digit numbers.**Day 2**: Use compact and expanded addition to add pairs of three-digit numbers.**Day 3:** Find a difference between pairs of numbers within the same century. **Day 4:** Find a difference between pairs of numbers, check with addition.**Day 5:** Addition and subtraction word problems. | **Day 1:** 1. Add two three-digit numbers using expanded addition where the 1s are >10, and/or 10s > 100. 2. Begin to use compact addition.**Day 2:** 1. Add two three-digit numbers using expanded addition where the 1s are >10, or 10s > 100. 2. Begin to use compact addition.2. Use rounding to estimate totals.**Day 3:** 1. Subtract using counting up on the empty number line (Frog), numbers within a century.**Day 4:** 1. Subtract using counting up on the empty number line (Frog). 2. Use addition to check subtraction.**Day 5:** 1. Interpret a word problem.2. Use addition or counting up subtraction to solve a word problem.3. Begin to solve 2-step problems. | ***Written addition and mental subtraction*****Day 1:** Add three three-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:** 1. Use compact addition to add three three-digit numbers2. Approximate the answer first**Day 2:** 1. Use compact addition to add amounts of money2. Approximate the answer first**Day 3:** 1. Subtract pairs of three-digit numbers using expanded decomposition (one ‘move’)**Day 4:** 1. Begin to use compact decomposition to subtract pairs of three-digit numbers (one ‘move’)**Day 5:** 1. Begin to use compact decomposition to subtract pairs of three-digit numbers (two ‘moves’) |
| 9 | ***MEASURES/SHAPE Time, position and direction*****Day 1:** Read and write analogue and digital times**Day 2**: Match analogue & digital times; read and write these**Day 3:** Begin to calculate time intervals**Day 4:** Calculate time intervals**Day 5:** Understand angles as turn & right angles as ¼ turns  | **Day 1:** Tell the time to the nearest minute, past and to.Read analogue and digital times and convert between the two.**Day 2:** Tell the time on analogue and digital clocks and match corresponding times.Convert between reading analogue and digital times.**Day 3** Find a time a number of minutes later some crossing the hour.**Day 4:** Find pairs of times a given number of minute apart, some crossing the hour.**Day 5:** Understand angles as degrees of turn.Use the language clockwise and anticlockwise.Know that a right angle is a quarter turn and four a complete turn. | ***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 and translate shapes in first quadrant. | **Day 1:** Tell the time on an analogue clock using am and pm.Begin to understand concept of 24-hour clock.**Day 2:** Find times that are 30, 40 and 45 minutes later, crossing the hour. **Day 3:** Read and create 24-hr timetables.Calculate time intervals using a number line and crossing over the hour.**Day 4:** Plot and write co-ordinates in the first quadrant.Complete polygons by giving missing points.**Day 5:**Describe translations of shapes on a grid and write new co-ordinates. |
| 10 | ***Mental multiplication and division*****Day 1:** Double the 4 times table to get the 8 times table.**Day 2**: Varied multiplications for the 2, 3, 4, 5, 8, 10 times tables.**Day 3:** Division within tables with remainders.**Day 4:** Division within tables with remainders (÷2, 3, 4, 5, 8 and 10).**Day 5:** Solve multiplication and division word problems.  | **Day 1:** Know the 4 times table.Use the 4 times table to learn the 8 times table. **Day 2:** Know the 2, 3, 4, 5, 8, 10 times tables by heart and use commutativity and known facts to derive others.**Day 3:** Divide whole numbers by 2, 3, 4, 5, 8 or 10, using times tables and find remainders.**Day 4:**  Divide whole numbers by 2, 3, 4, 5, 8 or 10.**Day 5:** Know which calculation to perform (multiplication or division) in order to solve a word problem. Use multiplication or division to solve a word problem. | ***Mental multiplication and division*****Day 1:** Begin to know multiplication and division facts for the 7 times table. **Day 2:** Know multiplication and division facts for the 9 times table.**Day 3:** Revise all times tables up to 12 × 10.**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:** Begin to know multiplication and division facts for the 7 times table.Use commutativity and known facts to derive new multiplication facts.**Day 2:** Know multiplication and division facts for the 9 times table.**Day 3:** Know most multiplication facts up to 12 and use commutativity and known facts to derive others.**Day 4:** Find factors of numbers up to 40.**Day 5:** Multiply single-digit numbers by multiples of 10 and 100. |
| 11 | ***Mental multiplication and division*** **Day 1:** Multiply by 4 by doubling twice. **Day 2**: Divide by 4 by halving twice.**Day 3:** Find unit fractions of quantities using division facts. **Day 4:** Find non-unit fractions of quantities using division & multiplication. **Day 5:** Find non-unit fractions of quantities using division and multiplication. | **Day 1:** Know multiplying by 4 is the same as doubling twice.2. Double a number twice to multiply it by 4. **Day 2:** Know dividing by 4 is the same as halving and halving again.2. Divide a number by 4 by halving twice. **Day 3:** Find unit-fractions using knowledge of multiplication and division: halves, quarters, thirds, fifths, eighths and tenths.**Day 4:** Find non-unit fractions using knowledge of multiplication and division: halves, quarters, thirds, fifths, eighths and tenths. **Day 5:** Find non-unit fractions using knowledge of multiplication and division: halves, quarters, thirds, fifths, eights and tenths. | ***Written multiplication and division*** **Day 1:** Use the grid method to multiply three-digit numbers by one-digit numbers. **Day 2:** Use the ladder method to multiply three-digit numbers by one-digit numbers. **Day 3:** Use the grid or ladder method to multiply three-digit numbers by one-digit numbers.**Day 4:** Know the 11 and 12 times tables.**Day 5:** Divide two-digit numbers by single-digit numbers (with remainders).  | **Day 1:** Use the grid method to multiply three-digit numbers by single-digit numbers.**Day 2:** Use the ladder method to multiply three-digit numbers by single-digit numbers (grid or ladder layout).**Day 3:** Use the ladder method to multiply three-digit numbers by single-digit numbers. Use rounding to approximate an answer.**Day 4:** Know the 11 and 12 times tables **Day 5:** Divide two-digit numbers by single-digit remainders, including those divisions which give a remainder (answers between 10 and 30).Use traditional ‘bus-stop’ layout. |

***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**