Year 4 2023- 24 Overview Maths

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7

Recap place value in 3-digit numbers initially as appropriate.

Number and Place value
- ➤ Recognise the place value of each digit in four-digit numbers up to 10,000 (thousands, hundreds, tens, and ones)
- ➤ Identify, represent and estimate numbers using different representations using numbers up to 10,000.
- ➤ Order and compare numbers up to 10,000 using < > =
- ➤ Order and compare numbers up to 10,000 using a number line.
- ➤ Count in multiples of 6, 7, 9 25 and 1000 *(In lesson then move to MMM)*
- ➤ Solve number and practical problems that involve all of the above with increasingly large positive numbers up to 10,000

Recap rounding basics so that this can be added into MMM sessions. E.g. Rounding 2 and 3 digit numbers to the nearest 10 and 100

Number Addition and subtraction
- ➤ Find 1, 10, 100 and 1000 more or less than a given number under 10,000,
- ➤ Add and subtract numbers with up to 3 digits using the formal written method for addition and subtraction including carrying and exchanging.
- ➤ Add and subtract numbers with 4 digits using the formal written methods for addition and subtraction where appropriate.
- ➤ Estimate and use the inverse operations to check the answer to a calculation.
- ➤ Solve addition and subtraction two step problems in contexts (focus on measures particularly length, capacity, weight) deciding on which operation and method to use and why.

Number and Place Value

Round any number up to 10,000 to the nearest 10,100 or 10000

Half term

Measurement: Mass and Capacity (year 3)

- ➤ Choose and use appropriate standard units to estimate mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels
- ➤ compare and order mass, volume/capacity and record the results using >, < and =
- ➤ Measure mass

Multiplication and division
- ➤ Use place value, known and derived facts to multiply and divide mentally, including:
- ➤ Pupils use multiplication and division facts to derive related facts e.g. 3 x 2 = 6, 30 x 2 = 60 extending this to 3 digit numbers e.g. 2 x 300 = 600 and understanding the relationship between multiplication and division facts e.g. 600 / 3 = 200 can be derived from 2 z 3 = 6.multiplying by 0 and 1; dividing by 1;
- ➤ multiplying together three numbers – use commutativity here e.g. 4 x 12 x 5 becomes 4 x 5 =20 x 12 and then becomes 20 x 12.

Geometry Properties of Shape
- ➤ Describe the properties of 2D and 3D shapes using accurate terminology.
- ➤ Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.
- ➤ Identify horizontal lines and vertical lines and pairs of perpendicular and parallel lines.
- ➤ Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- ➤ Identify acute and obtuse angles and compare and order angles up to two right angles by size
- ➤ Identify symmetrical and non-symmetrical polygons.
- ➤
- ➤ Identify lines of symmetry in 2-D shapes presented in different orientations
- ➤ Complete a simple symmetric figure with respect to a specific line of symmetry

				➢ Compare mass ➢ Add and subtract mass ➢ Measure capacity ➢ Compare capacity Add and subtract capacity	➢ recognise and use factor pairs and commutativity in mental calculations ➢ Use the distributive law for mental calculations. ➢ Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit (if time)	

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Spring Term													
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	

Multiplication and division

(Written methods)

- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
- Use informal written methods for division (number lines or jottings), for example, using known facts to divide 63/3.
- Solve problems involving all four operations including different surface, same problem questions.

Number: Fractions

- Count up and down in halves and $\frac{2}{4}$ and other basic fractions verbally.
- Compare and order unit fractions and fractions with the same denominator.
- Add and subtract fractions with the same denominator within one whole using practical resources and diagrams to represent this. (Ensure understanding – why do we not add the denominator?)
- Add and subtract fractions with the same denominator going over one whole (using simple fractions) e.g. $2\frac{1}{2} + 3\frac{1}{2}$; $\frac{3}{4} + \frac{2}{4}$
- Recognise and show using diagrams, equivalent fractions with small denominators, e.g. $\frac{1}{2} = \frac{2}{4}$, $\frac{1}{3} = \frac{2}{6}$ etc.
- Recognise and show using diagrams, families of common equivalent fractions e.g. $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$; $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}$; including simple non-unit fractions $\frac{3}{4} = \frac{6}{8} = \frac{9}{12}$
- Recognise and use fractions as numbers: Use the bar model and introduce more efficient methods of calculating non-unit fractions e.g. $\frac{3}{5}$ of 30 = 30 ÷ 5 = 6x 3 = 18

Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities where the answer is a whole number

Half term (Week 7)

Measurement: Area

Find the area of rectilinear shapes by counting squares

Fractions – Decimal numbers

- Recognise tenths and hundredths and begin to understand the equivalence between tenths and hundredths.
- Count up and down in tenths; recognise that tenths arise from splitting an object into ten equal parts.
- Identify Tenths as decimals
- Understand the place value of tenths including how many tenths in numbers larger than one-whole, for example 3.2 = 3 wholes (30/10) and 2/10's.) Place tenths using place value charts and number lines.
- Divide 1 digit numbers by 10, for example, 4 / 10 = 0.4
- Divide 2 digit numbers by 10, for example: 35 / 10 = 3.5
- Recognise that hundredths arise from dividing a number into 100 equal parts and understand equivalence between tenths and hundredths.
- Identify hundredths as decimal numbers.
- Understand the place value of hundredths using place value grids.
- Divide 1 and 2 digit numbers by 100, for example 4/100 = 0.04 and 72/100 = 0.72

Number and Place Value

- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.

When finished move onto time.

Measurement: Time

- Tell and write the time from an analogue clock, including clocks with Roman numerals with increasing accuracy to the **nearest minute.**
- Record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/ pm, morning afternoon, noon and midnight.
- Know the number of seconds in a minute, number of days in each month and days in a year/ leap year.
- Convert between different units of measure, for example hours to minutes.
- compare durations of events [for example to calculate the time taken by particular events or tasks].
- Read, write and convert time between analogue and digital 12 and 24 hour clocks.
- Solve problems converting from hours to minutes; minutes to seconds; years to months; weeks to days

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Summer Term													
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Time Continued	**Number: Decimals** ➤ Understand that decimal numbers (tenths and hundredths) can be combined to make a whole. ➤ Understand the place value of numbers with up to 2 decimal places. For example **2**5.03 value of the 2 is 20. Partition numbers. ➤ Compare single and two whole digit numbers with up to 2 decimal places. E.g. 35.81 ➤ Order numbers with 2 decimal places. ➤ Round decimals with one decimal place to the nearest whole number. ➤ Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ Solve number and practical problems that involve all of the above with increasingly large positive numbers up to 10,000 including numbers with up to 2 decimal places.			**Measurement: Money** ➤ add and subtract amounts of money to give change, using both £ and p in practical contexts recording £ and p separately. ➤ Understand £ and pence and the decimal notation for money. ➤ Compare and order quantities and amounts of money shown in £ and pence (decimal notation) ➤ Estimate using money including pounds and pence. (decimal notation) Solve problems using all four operations and money.	**Number and Place Value** ➤ Count backwards through zero to include negative numbers.	Half term	**Measurement: Length and Perimeter** ➤ Measure the perimeter of simple 2-D shapes ➤ Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and M. ➤ Find the area of rectilinear shapes by counting squares ➤ Understand the equivalence between different units of measurement for length including M to cm and cm to mm and vice versa Convert kilometres into metres and vice versa using real life contexts		Assessment Week	**Geometry: position and direction** ➤ Pupils should be taught to: Describe positions on a 2-D grid as coordinates in the first quadrant. ➤ Describe movements between positions as translations of a given unit to the left/right and up/down. Plot specified points and draw sides to complete a given polygon.		**Statistics** ➤ Interpret and present data using bar charts, pictograms and tables. ➤ Pupils understand scales of 2,5, and 10 with increasing accuracy. ➤ Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictogram	

	s and tables.						Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. (Large time graph focus in year 5) Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.