HOOK JUNIOR SCHOOL

Y4 Long Term Plan

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Aut.	Number and Place Value in the Thousands				Geometry: Perimeter		3x, 6x and 9x tables	Multiplication and Division	Division with Remainders	Multiplying and Dividing by 10 and 100	Measures: Equivalent Lengths	7x tables / consolidation of multiplication and division	Geometry: Coordinates		
Spr.	Decimals: Tenths	Decimals: Hundredths and Thousandths	Money	Short Multiplication		Area and Perimeter / Scaling		Short Division			Statistics	Consolidation			
Sum.	Fractions: Improper Fractions and Mixed Numbers			Fractions: Multiplying Fractions and Whole Numbers		11x and 12x tables	Geometry: Properties of Shapes		Roman Numerals / Time			Consolidation of the Y4 curriculum			

Year 4 Medium Term Plan - Whole Overview 2023 - 2024

Each step below is not one lesson or one learning target. Breakdown steps into smaller learning targets, with one learning target per lesson. Use the NCETM spines for the teaching sequence and visuals and use White Rose tasks where they fit alongside other appropriate tasks.

Find out from Y3 how far children got in learning their times tables. Use times tables time to build on this.

Number and Place Value in the Thousands

(approximately 4 weeks)

Spine 1.22: Composition and Calculation – 1,000 and four-digit numbers

Explore the composition of 1,000 and four-digit numbers, using the partitioning structure, and make links to measures; introduce children to calculation across thousands boundaries, and extend column algorithms and rounding to four-digit numbers.

1. Use White Rose Y4 (Y3 recap) representing numbers to 100. Use this to assess which representation of number / resources children are familiar with and ensure that the part-part-whole model is familiar. Also use to reinforce expectations of how book and resources are used.
2. **Spine 1.22 Teaching point 1** – Ten hundreds make 1,000, which can also be decomposed into 100 tens and 1,000 ones.
3. **Spine 1.22 Teaching point 2** –. When multiples of 100 are added or subtracted, the sum or difference is always a multiple of 100.
4. **Spine 1.22 Teaching point 3** – Numbers over 1,000 have a structure that relates to their size. This means they can be ordered, composed and decomposed.
5. **Spine 1.22 Teaching point 4** – Numbers can be rounded to simplify calculations or to indicate approximate sizes. Teach how to estimate the answer to a calculation using rounding and using the inverse to check answers (Y3 curriculum).
6. **Spine 1.22 Teaching point 5** – Calculation approaches learnt for three-digit numbers can be applied to four-digit numbers.
7. **Spine 1.22 Teaching point 6** – 1,000 can also be composed multiplicatively from 500s, 250s or 200s, units that are commonly used in graphing and measures.
8. Use **Spine 1.20** from Y3 to recap column addition. Use diennes to ensure conceptual understanding of exchanging is secure.
9. Use **Spine 1.21** from Y3 to recap column subtraction. Again, use diennes to ensure conceptual understanding of exchanging is secure.

10. Use Y3 Spine 1.18 to recap mental strategies for addition and subtraction. This may take up to a week depending of how proficient the children are in these strategies. Use spine 1.18 and calculation policy to support with strategies children should know. Spend multiple lessons revising and extending the 'make 10 / 100 / 1000', redistribution, compensating and adjusting, same difference and small difference methods to larger numbers.
11. Solve a range of addition and subtraction one and two-step problems in contexts, deciding which operations and methods to use (both written and mental).

Geometry: Perimeter

Geometry – Perimeter (addition in context) – approximately 1 to 2 weeks

Start unit by ensuring that children can identify and group commonly encountered shapes based on number of sides and angles (triangle / quadrilateral / pentagon / hexagon / octagon). Additionally, ensure children can describe the properties of squares and rectangles relating to equal length of sides, right angles and pairs of parallel sides.

Use teaching points, sequence and supporting visuals from the curriculum prioritisation material / ready to progress.

1 A regular polygon has sides that are all the same length and interior angles that are all equal in size
2 Perimeter is the distance around the edge of a two-dimensional shape
3 Different shapes can have the same perimeter
4 Perimeter is measured in units of length and can be found by counting units
5 Perimeter can be calculated by adding together the side lengths of a 2D shape
6 The perimeter of a rectangle can be calculated by addition and multiplication
7 Unknown side lengths can be calculated from perimeter and known side lengths
8 The perimeter of a regular polygon can be calculated by multiplication
9 The side length of a regular polygon can be calculated by division where the perimeter is known

Spine 2.9 to be taught within maths lessons. Ensure children are secure on their 2x, 4x and 8x first. The 2022/23 cohort of Y4 may not have completed 2.8 on the 3, 6 and 9x tables. If this is the case, teach this now and teach 2.9 after 2.10.

3x, 6x and 9x Tables

(approximately 2 lessons on each times table)

Spine 2.8: Times Tables – 3, 6 and 9, and the relationship between them

Build up the three/six/nine times table; using different structures/interpretations of multiplication and division, solve problems related to these tables; explore connections between the three, six and nine times tables.

1. **Spine 2.8 Teaching point 1** – Counting in multiples of three can be represented by the three times table. Adjacent multiples of three have a difference of three. Facts from the three times table can be used to solve multiplication and division problems with different structures.
2. **Spine 2.8 Teaching point 2** – Counting in multiples of six can be represented by the six times table. Adjacent multiples of six have a difference of six. Facts from the six times table can be used to solve multiplication and division problems with different structures.
3. **Spine 2.8 Teaching point 3** – Products in the six times table are double the products in the three times table; products in the three times table are half of the products in the six times table.
4. **Spine 2.8 Teaching point 4** – Counting in multiples of nine can be represented by the nine times table. Adjacent multiples of nine have a difference of nine. Facts from the nine times table can be used to solve multiplication and division problems with different structures.
5. **Spine 2.8 Teaching point 5** – Products in the nine times table are triple the products in the three times table. Products that are in the three, six and nine times tables share the same factors.
6. **Spine 2.8 Teaching point 6** – Divisibility rules can be used to find out whether a given number is divisible (to give a whole number) by three, six or nine.

Multiplication and Division

(approximately 1 week)

Spine 2.10: Connecting Multiplication and Division, and the Distributive Law

Explore why multiplication is commutative while division is not. Build on understanding of the difference between adjacent multiples to explore the distributive law, and apply it to derive multiplication facts.

1. **Spine 2.10 Teaching point 1** – Multiplication is commutative; division is not commutative.
2. **Spine 2.10 Teaching point 2** – Multiplication is distributive: multiplication facts can be derived from related known facts by partitioning one of the factors, and this can be interpreted as partitioning the number of groups; two-part problems that involve addition/subtraction of products with a common factor can be efficiently solved by applying the distributive law.
3. **Spine 2.10 Teaching point 3** – The distributive law can be used to derive multiplication facts beyond known times tables.

Division with Remainders

(approximately 1 week)

Spine 2.12: Division with Remainders

Explore how some quantities can be split into equal groups with a remainder, and express this using mathematical notation; practise interpreting the meaning of the remainder in different contexts.

1. **Spine 2.12 Teaching point 1** – Objects can be divided into equal groups, sometimes with a remainder; objects can be shared equally, sometimes with a remainder; a remainder can be represented as part of a division equation.
2. **Spine 2.12 Teaching point 2** – If the dividend is a multiple of the divisor, there is no remainder; if the dividend is not a multiple of the divisor, there is a remainder. The remainder is always less than the divisor.
3. **Spine 2.12 Teaching point 3** – When solving contextual problems involving remainders, the answer to a division calculation must be interpreted carefully to determine how to make sense of the remainder.

Multiplying and Dividing by 10 and 100

(approximately 1 week)

Spine 2.13: Calculation – multiplying and dividing by 10 or 100

Use place-value knowledge to develop strategies for multiplying/dividing by 10 and 100. Generalise about the product or quotient when a factor or the dividend is made 10 or 100 times bigger/smaller.

1. **Spine 2.13 Teaching point 1** – Finding 10 times as many is the same as multiplying by 10 (for positive numbers); to multiply a whole number by 10, place a zero after the final digit of that number – read the guidance on teaching this to ensure children have secure conceptual understanding of what is happening.
2. **Spine 2.13 Teaching point 2** – To divide a multiple of 10 by 10, remove the final zero digit (in the ones place) from that number.
3. **Spine 2.13 Teaching point 3** – Finding 100 times as many is the same as multiplying by 100 (for positive numbers); to multiply a whole number by 100, place two zeros after the final digit of that number.
4. **Spine 2.13 Teaching point 4** – To divide a multiple of 100 by 100, remove the final two zero digits (in the tens and ones places) from that number.
5. **Spine 2.13 Teaching point 5** – Multiplying a number by 100 is equivalent to multiplying by 10, and then multiplying the product by 10. Dividing a multiple of 100 by 100 is equivalent to dividing by 10, and then dividing the quotient by 10.
6. **Spine 2.13 Teaching point 6** – If one factor is made 10 times the size, the product will be 10 times the size. If the dividend is made 10 times the size, the quotient will be 10 times the size.
7. **Spine 2.13 Teaching point 7** – If one factor is made 100 times the size, the product will be 100 times the size. If the dividend is made 100 times the size, the quotient will be 100 times the size.

Measures: Equivalent Lengths

(approximately 1 week)

This unit provides an opportunity to apply multiplying and dividing by 10 and 100. It builds on understanding of the different measures taught in Y3. For this unit, use the White Rose Y3 measure lessons (specifically those on equivalent measures although the other may be used to recap prior learning.

1. Convert between equivalent lengths (m, cm, mm)

7x Tables

(approximately 2 lessons)

Spine 2.9: Times tables: 7 and patterns within/across times tables

Build up the seven times table and solve associated multiplication and division problems; explore times table patterns including generalising about the product in terms of odd/even factors, reviewing divisibility rules, and exploring square numbers.

1. **Spine 2.9 Teaching point 1** – Counting in multiples of seven can be represented by the seven times table. Adjacent multiples of seven have a difference of seven. Facts from the seven times table can be used to solve multiplication and division problems with different structures.
2. **Spine 2.9 Teaching point 2** – When both factors are odd numbers, the product is an odd number; when one factor is an odd number and the other is an even number, the product is an even number; when both factors are even numbers, the product is an even number.
3. **Spine 2.9 Teaching point 3** – When both factors have the same value, the product is called a square number; square numbers can be represented by objects arranged in square arrays.
4. **Spine 2.9 Teaching point 4** – Divisibility rules can be used to find out whether a given number is divisible (to give a whole number) by particular divisors.

Geometry: Coordinates

(approximately 2 weeks)

NC Objectives:

- Describe positions on a 2-D grid as coordinates in the first quadrant. Plot specified points and draw sides to complete a given polygon.
- Describe movements between positions as translations of a given unit to the left/ right and up/ down.

Key vocabulary: translate, left, right, up, down, coordinate, quadrant, polygon, x axes, y axes, vertex, vertices,

Use teaching points, sequence and supporting visuals from the NCETM (curriculum prioritisation material / ready to progress).

1 Pupils give directions from one position to another on a grid
2 Pupils move objects including polygons on a grid according to directions, and mark the new position
3 Pupils describe translations of polygons drawn on a square grid
4 Pupils draw polygons specified by translations
5 Pupils mark points specified as a translation from the origin

6 Pupils mark the position of points specified by coordinates in the first quadrant of a coordinate grid, and write coordinates for already-marked points
7 Pupils draw polygons specified by coordinates in the first quadrant
8 Pupils translate polygons in the first quadrant

Decimals: Tenths

(approximately 1 weeks)

Spine 1.23: Composition and Calculation – tenths

Introduce children to tenths using both the partitioning structure and ideas of place value; apply additive facts and strategies, including column algorithms, and rounding to numbers with tenths.

1. **Spine 1.23 Teaching point 1** – When one is divided into ten equal parts, each part is one tenth of the whole.
2. **Spine 1.23 Teaching point 2** –. Tenths can be expressed as decimal fractions; the number written '0.1' is one tenth; one is ten times the size of 0.1.
3. **Spine 1.23 Teaching point 3** – We can count in tenths up to and beyond one.
4. **Spine 1.23 Teaching point 4** – Numbers with tenths can be composed additively and multiplicatively.
5. **Spine 1.23 Teaching point 5** – Known facts and strategies, including column algorithms, can be applied to calculations for numbers with tenths.
6. **Spine 1.23 Teaching point 6** – Numbers with tenths can be rounded to the nearest whole number by examining the value of the tenths digit.

Decimals: Hundredths and Thousandths

(approximately 1 week)

Spine 1.24: Composition and Calculation – hundredths and thousandths

Building on segment 1.23, introduce children to hundredths (and thousandths) using both the partitioning structure and ideas of place value; apply additive facts and strategies, including column algorithms, and rounding to numbers with hundredths (and thousandths).

1. **Spine 1.24 Teaching point 1** – When one is divided into 100 equal parts, each part is one hundredth of the whole. When one tenth of a whole is divided into ten equal parts, each part is one hundredth of the whole.
2. **Spine 1.24 Teaching point 2** –. Hundredths can be expressed as decimal fractions; the number written '0.01' is one hundredth; one is one hundred times the size of 0.01; 0.1 is ten times the size of 0.01.
3. **Spine 1.24 Teaching point 3** – We can count in hundredths up to and beyond one.
4. **Spine 1.24 Teaching point 4** – Numbers with hundredths can be composed additively and multiplicatively.
5. **Spine 1.24 Teaching point 5** – Numbers with tenths and hundredths are commonly used in measurement, scales and graphing contexts.
6. **Spine 1.24 Teaching point 6** –. Known facts and strategies, including column algorithms, can be applied to calculations for numbers with hundredths; the same approaches can be used for numbers with hundredths as are used for numbers with tenths.
7. **Spine 1.24 Teaching point 7** – Numbers with hundredths can be rounded to the nearest tenth by examining the value of the hundredths digit or to the nearest whole number by examining the value of the tenths digit.
8. **Spine 1.24 Teaching point 8** – When one is divided into 1,000 equal parts, each part is one thousandth of the whole. Knowledge and strategies for numbers with tenths and hundredths can be applied to numbers with thousandths.
9. **Additional NC objective**: recognise and write decimal equivalents to ½ ¼ and ¾ .

Money

(approximately 1 weeks)

Spine 1.25: Addition and Subtraction – money

Building on segments 1.23 and 1.24, introduce children to conventions for expressing monetary value and explore the equivalence of 100p and £1; encourage children to select column algorithms or equivalent calculations where most appropriate.

1. **Spine 1.25 Teaching point 1** – One penny is one hundredth of a pound; conventions for expressing quantities of money are based on expressing numbers with tenths and hundredths.
2. **Spine 1.25 Teaching point 2** –. Equivalent calculation strategies for addition can be used to efficiently add commonly-used prices.

3. Spine 1.25 Teaching point 3 – The ‘working forwards’/‘finding the difference’ strategy for subtraction is an efficient way to calculate the change due when paying in whole pounds or notes.
4. Spine 1.25 Teaching point 4 – Column methods can be used to add and subtract quantities of money.
5. Spine 1.25 Teaching point 5 – Finding change when purchasing several items uses the part–part–(part–) whole structure.

Short Multiplication

(approximately 2 weeks)

Spine 2.14: Multiplication: partitioning leading to short multiplication

Introduce the short multiplication algorithm, using it to multiply two-/three-digit numbers by single-digit numbers; explore regrouping where necessary.

1. Spine 2.14 Teaching point 1 – The distributive law can be applied to multiply any two-digit number by a single-digit number, by partitioning the two-digit number into tens and ones, multiplying the parts by the single-digit number, then adding the partial products.
2. Spine 2.14 Teaching point 2 – Any two-digit number can be multiplied by a single-digit number using an algorithm called ‘short multiplication’; the digits of the factors must be aligned correctly; the algorithm is applied working from the least significant digit (on the right) to the most significant digit (on the left); if the product in any column is ten or greater, we must ‘regroup’.
3. Spine 2.14 Teaching point 3 – The distributive law can be applied to multiply any three-digit number by a single-digit number, by partitioning the three-digit number into hundreds, tens and ones, multiplying the parts by the single-digit number, then adding the partial products.
4. Spine 2.14 Teaching point 4 – Any three-digit number can be multiplied by a single-digit number using the short multiplication algorithm.

Area and Perimeter

(approximately 1 week)

Spine 2.16: Multiplicative contexts: area and perimeter 1

Use addition and multiplication to solve problems about the perimeter of irregular and regular 2D shapes, and to find the area of rectilinear and composite rectilinear shapes; use division to solve associated inverse problems.

1. **Spine 2.16 Teaching point 1** – Perimeter is the distance around the edge of a two-dimensional (2D) shape.
2. **Spine 2.16 Teaching point 2** – Perimeter is measured in units of length and can be calculated by adding together the lengths of the sides of a 2D shape.
3. **Spine 2.16 Teaching point 3** – Multiplication can be used to calculate the perimeter of a regular polygon; when the perimeter is known, side-lengths can be calculated using division.
4. **Spine 2.16 Teaching point 4** – Area is the measurement of the surface of a flat item.
5. **Spine 2.16 Teaching point 5** – Area is measured in square units, such as square centimetres (cm^2) and square metres (m^2).
6. **Spine 2.16 Teaching point 6** – The area of a rectangle can be calculated using multiplication; the area of a composite rectilinear shape can be found by splitting the shape into smaller rectangles.

Scaling

(approximately 3 lessons)

Spine 2.17: Structures: using measures and comparison to understand scaling

Build on segment 2.13 to introduce the scaling structure of multiplication and division; use known multiplication and division strategies to solve problems about scaling/comparison problems.

1. **Spine 2.17 Teaching point 1** – A longer length can be described in terms of a shorter length using the language of ‘times’; the longer length can be calculated, if the shorter length is known, using multiplication.
2. **Spine 2.17 Teaching point 2** – A shorter length can be described in terms of a longer length using the language of fractions; the shorter length can be calculated, if the longer length is known, using division.
3. **Spine 2.17 Teaching point 3** – Other measures can be compared using the language of ‘times’ and fractions, and calculated using multiplication or division.

Short Division

(approximately 3 weeks)

Spine 2.15: Division: partitioning leading to short division

Introduce the short division algorithm, using it to divide two-/three-digit numbers by single-digit numbers; explore exchange where necessary.

1. **Spine 2.15 Teaching point 1** – Any two-digit number can be divided by a single-digit number, by partitioning the two-digit number into tens and ones, dividing the parts by the single-digit number, then adding the partial quotients; if dividing the tens gives a remainder of one or more tens, we must exchange the remaining tens for ones before dividing the resulting ones value by the single-digit number.
2. **Spine 2.15 Teaching point 2** – Any two-digit number can be divided by a single-digit number using an algorithm called 'short division'; the algorithm is applied working from the most significant digit (on the left) to the least significant digit (on the right); if there is a remainder in the tens column, we must 'exchange'.
3. **Spine 2.15 Teaching point 3** – Any three-digit number can be divided by a single-digit number, by partitioning the two-digit number into hundreds, tens and ones, dividing the parts by the single-digit number, then adding the partial quotients; if dividing the hundreds gives a remainder of one or more hundreds, we must exchange the remaining hundreds for tens before dividing the resulting tens value by the single-digit number.
4. **Spine 2.15 Teaching point 4** – Any three-digit number can be divided by a single-digit number using the short-division algorithm.
5. Revisit division with remainders from the autumn term through questions that require the short division method as a recap and to further embed the short division algorithm in a context.

Statistics

(approximately 1 week)

NC Objectives:

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Key vocabulary: scale, fewer, less, more, greater, most, least, difference, data, tally chart, discrete data, continuous data, axes, interpret, table, pictogram, represent, present

Steps in progression (based on White Rose Scheme of Learning – see this for planning guide):

NB: These steps are not one lesson or one learning target. Breakdown steps into smaller learning targets, with one learning target per lesson.

1. Interpret charts – interpreting discrete data in bar charts, pictograms and tables
2. Interpret charts – present their own discrete data from information they have gathered in a tally chart
3. Comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
4. Mini assessment

Fractions: Improper Fractions and Mixed Numbers

(approximately 3 weeks)

Spend extra time recapping Y3 content to begin with. Use extra visuals in addition to the spines to support all children to understand.

1. **Y3 Fractions End of Unit Mini Assessment** (use to identify whether additional recap is required) use Y3 **Ready to Progress** to close any gaps
2. **Spine 3.5 Teaching point 1** – Quantities made up of both wholes and parts can be expressed as mixed numbers
3. **Spine 3.5 Teaching point 2** – Mixed numbers can be placed on a number line
4. **Spine 3.5 Teaching point 3** – Understanding how to compare and order proper fractions supports the comparison and ordering of mixed numbers
5. **Spine 3.5 Teaching point 4** – Mixed numbers can be partitioned and combined in the same was as whole numbers
6. **Spine 3.5 Teaching point 5** – Mixed numbers can be written as improper fractions
7. **Spine 3.5 Teaching point 6** – Improper fractions can be added and subtracted in the same was as proper fractions
8. **Spine 3.6 Teaching point 1** – Repeated addition of proper and improper fractions can be expressed as multiplication of a fraction by a whole number

Fractions: Multiplying Whole Numbers and Fractions

(approximately 2 weeks)

1. **Spine 3.6 Teaching point 2** – Repeated addition of a mixed number can be expressed as multiplication of a mixed number by a whole number
2. **Spine 3.6 Teaching point 3** – Finding a unit fraction of a quantity can be expressed as a multiplication of a whole number by a fraction
3. **Spine 3.6 Teaching point 4** – A non-unit fraction of a quantity can be calculated by first finding a unit fraction of that quantity

4. Spine 3.6 Teaching point 5 – If the size of a non-unit fraction is known, the size of the unit fraction and then the size of the whole can be found
5. **Create Mini Assessment**

11x and 12x Tables

(approximately 1 week)

Spine 2.11: Times Tables – 11 and 12

Build up the eleven and twelve times tables using the distributive law, and solve associated multiplication and division problems. Combine known six times table facts with doubling facts and strategies to multiply by twelve.

1. Spine 2.11 Teaching point 1 – The distributive law can be used to build up the 11 times table by partitioning 11 into 10 and 1. Adjacent multiples of 11 have a difference of 11.
2. Spine 2.11 Teaching point 2 – The distributive law can be used to build up the 12 times table by partitioning 12 into 10 and 2. Adjacent multiples of 12 have a difference of 12.
3. Spine 2.11 Teaching point 3 – Products in the 12 times table are double the products in the six times table; products in the six times table are half of the products in the 12 times table.
4. Spine 2.11 Teaching point 4 – Divisibility rules can be used to find out whether a given number is divisible (to give a whole number) by 11 or 12.

Geometry: Properties of Shapes

(approximately 2 weeks)

NC Objectives:

- Identify acute and obtuse angles and compare and order angles up to two right angles by size
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- Identify lines of symmetry in 2-D shapes, presented in different orientations.
- Complete a simple symmetric figure with respect of a specific line of symmetry

Key vocabulary: acute, obtuse, angle, polygon, isosceles, scalene, right angle, equilateral triangle, straight line, quadrilateral, regular shape, irregular shape, square, rectangle, rhombus, trapezium, kite, parallelogram, parallel, perpendicular, vertex, sides, symmetry, symmetrical, properties, horizontal, vertical, diagonal lines

NB: These steps are not one lesson or one learning target. Breakdown steps into smaller learning targets, with one learning target per lesson.

Revision starter questions – revise equalities and inequalities and solving missing number problems for the four operations

Mini Starters – parallel and perpendicular lines, acute/obtuse/straight line/right angles, sorting polygons and not polygons, recapping vocabulary

1. Identify types of angles and compare and order angles (acute, obtuse and right angles)
2. Triangles – describe the properties and name different triangles based on these
3. Triangles – draw different quadrilaterals applying their properties
4. Recap Y3 parallel and perpendicular lines
5. Quadrilaterals – describe the properties and name different quadrilaterals based on these
6. Quadrilaterals – draw different quadrilaterals applying their properties
7. Lines of symmetry – within 2-D shapes and compare to properties
8. Lines of symmetry – apply to shapes of different sizes and orientations
9. Symmetric figures

Roman Numerals

(approximately 3 lessons)

1. Read Roman numerals to 20 (I to XX) – Year 3 recap
2. Read Roman numerals to 100 (I to C)

Time

(approximately 2 weeks)

NC Objectives:

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

Key vocabulary: hours, minutes, quarter to/ past, to, past, month, year, calendar, duration, leap year, a.m., p.m., morning, afternoon, noon, analogue, digital

Steps in progression based on White Rose Scheme of Learning:

NB: These steps are not one lesson or one learning target. Breakdown steps into smaller learning targets, with one learning target per lesson.

Complete AfL prior to teaching this unit to assess children's prior learning and retention of time. Use the Y3 White Rose End of Block Assessment for this.

Retrieval Practice – hours in a day**,** days of the week/months, telling the time to 5 mins, am and pm, hours, minutes and seconds

1. Recap: Y3 o'clock, half past, quarter past and quarter to
2. Recap: Y3 telling the time to the nearest 5 minutes and minute
3. **White Rose Step 1:** Years, months, weeks and days
4. **White Rose Step 2:** Hours, minutes and seconds
5. **White Rose Step 3:** Convert between analogue and digital times
6. **White Rose Step 4:** Convert to the 24 hour clock

7. **White Rose Step 5:** Convert from the 24 hour clock
8. Recap: Y3 finding the duration
9. Recap:Y3 comparing the duration
10. Recap:Y3 start and end times
11. Problem solving involving all learnt time skills
12. Mini assessment – use White Rose End of Block assessment