# St. Mary's Catholic High School LTP MATH (2019-2020)

## YEAR 1 LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 1 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | Yr1/1 | Yr 1/2 | Yr1/3 | Yr1/4 | Yr1/5 | Yr1/6 | Yr1/7 | Yr1/8 |
| | Number and Place value/ Addition | Number and Place value/ Addition | Addition and Subtraction | Fractions/ Shape / Statistics | r and Place value/ Addition and Subt | Number and Place value | er and Place value/ Addition and Subt | Fractions/ Measure/ Position |
| Term 1 | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1C** Match counting | **N1.1F** Identify missing numbers up to and including 100. **N1.2B** Partition a collection of up to 10 objects, and then up to and including 20 objects, in two. **N1.2C** Solve addition | **N1.2** A Say aloud the number that is 1 more than any number from 0–99 and 1 less than any number from 1–100. | **N1.3** A Recognise, work out and name a half as one of two equal parts of an object or shape and recognise that two-halves make one-whole. **G1.2A** Recognise and say aloud the name of common 2D shapes: rectangles | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1C** Match counting | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1E** Understand 2-digit | **N1.1F** Identify missing numbers up to and including 100. **N1.2B** Partition a collection of up to 10 objects, then up to and including 20 objects, in two. **N1.2C** Solve addition problems involving number | **N1.3A** Recognise, work out and name a half as one of two equal parts of an object or shape and recognise that two-halves make one-whole. **G1.1A** Use words only (no numbers) to compare, order and describe |

| YEAR 1 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | |
|---|---|---|---|---|---|---|---|---|
| | Yr1/9 | Yr1/10 | Yr1/11 | Yr1/12 | Yr1/13 | Yr1/14 | Yr1/15 | |
| | ber and Place value/ Addition and subtra | Number and Place value/ Measure | nber and Place value/ Addition and Subtract | Number and Place value/ Addition and Subtracti | Addition and Subtraction | Measure/ Shape/ Statistics | Number and Place value | |
| Term 1 | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.2B** Partition a collection of up to 10 objects, and then up to and including 20 objects, in two. | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1C** Match counting numbers (and also 0) to objects, images or actions. **N1.1D** Recognise patterns | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1C** Match counting numbers (and also 0) to objects, images or actions. **N1.1D** Recognise patterns when | **N1.1F** Identify missing numbers up to and including 100. **N1.2B** Partition a collection of up to 10 objects, and then up to and including 20 objects, in two. **N1.2C** Solve addition problems involving number bonds up to and including 20. **N1.2E** Solve subtraction problems | **N1.2D** Recognise and use the commutative nature of addition. **N1.2G** Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) for number bonds up to and including 20. | **G1.1E** Know the meaning of 'hour', 'day' and 'week' and say aloud days of the week in order.      **G1.2B** Recognise and say aloud the name of 3D solids: cuboids (including cubes). **S1.1A** Sort objects in a variety of ways and count the number of objects in | **N1.1C** Match counting numbers (and also 0) to objects, images or actions. **N1.1D** Recognise patterns when counting to 100. | **Revision and Assessment First term** |

| YEAR 1 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | Yr1/16 | Yr1/17 | Yr1/18 | Yr1/19 | Yr1/20 | Yr1/21 | Yr1/22 | Yr1/23 |
| | umber and Place value/ Fractions/ Measu | Addition and Subtraction | Fractions/ Measure | Addition and Subtraction | Number and Place value/ Addition | Number and Place value/ Addition and | Addition and Subtraction | Addition and Subtraction |
| Term 2 | **N1.1D** Recognise patterns when counting to 100. **N1.3A** Recognise, work out and name a half as one of two equal parts of an object or shape and recognise that two-halves make one- | **N1.2B** Partition a collection of up to 10 objects, and then up to and including 20 objects, in two. **N1.2C** Solve addition problems involving number bonds up to and including | **N1.3A** Recognise, work out and name a half as one of two equal parts of an object or shape and recognise that two-halves make one-whole. **G1.1A** Use words only (no numbers) to compare, order | **N1.2C** Solve addition problems involving number bonds up to and including 20. **N1.2D** Recognise and use the commutative nature of addition. **N1.2E** Solve subtraction problems | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. | **N1.2C** Solve addition problems involving number bonds up to and including 20. **N1.2E** Solve subtraction problems involving number bonds up to and | **N1.2C** Solve addition problems involving number bonds up to and including 20. **N1.2E** Solve subtraction problems involving number bonds up to and |

| Term2 | Yr1/24 | Yr1/25 | Yr1/26 | Yr1/27 | Yr1/28 | Yr1/29 | Yr1/30 | Yr1/31 |
|---|---|---|---|---|---|---|---|---|
| | Measure/ Statistics | Number and Place value/ Fra | Number and Place value | Number and Place value | Measure/ Shape/ Statistics | Addition and Subtraction/ Measure | Number and Place value | |
| Term2 | **G1.1A** Use words only (no numbers) to compare, order and describe different measures. **G1.1B** Measure lengths/heights, mass/weight, capacity/volume with nonstandard units. **S1.1B** | **N1.1D** Recognise patterns when counting to 100. **N1.3A** Recognise, work out and name a half as one of two equal parts of an object or shape and recognise that two-halves make one-whole. | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1C** Match counting numbers | **N1.1C** Match counting numbers (and also 0) to objects, images or actions. **N1.1D** Recognise patterns when counting to 100. | **G1.1A** Use words only (no numbers) to compare, order and describe different measures. **G1.1B** Measure lengths/heights, mass/weight, capacity/volume with | **N1.2C** Solve addition problems involving number bonds up to and including 20. **N1.2D** Recognise and use the commutative nature of addition. **N1.2E** Solve subtraction | **N1.1A** Count forwards and backwards to and from 100, starting at any given number. **N1.1B** Read, write and say aloud numbers written in figures from 1–100. **N1.1C** Match counting | **Revision and Assessment Final term** |

## YEAR 2 LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 2 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | | | | **Band 1** | | | | |
| | **Number and Place Value** | **Number and Place Value/ Addition and Subtraction** | **Addition and Subtraction/ Multiplication and Division** | **Shape/ Statistics** | **Number and Place Value/ Addition and Subtraction** | **Number and Place Value/ Addition and Subtraction/ Measure** | **Number and Place Value/ Addition and Subtraction** | **Number and Place Value/ Measure/ Position** |
| | Y 2/1 | Y 2/2 | Y 2/3 | Y 2/4 | Y 2/5 | Y 2/6 | Y 2/7 | Y 2/8 |
| | **N1.1F** Identify missing | **N2.1A** Count in steps of 2 | **N2.2A** Know number bonds for | **G2.2A** Identify, describe and | **N2.1A** Count in steps of 2 | **N2.1E** Recognise the place | **N1.1C** Match counting | **N2.1F** Compare and order |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| numbers up to and including 100. **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1B** Understand 0 and count | from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 | numbers up to and including 20. **N2.2B** Recognise and work out bonds for multiples of 10, up to and including 100. **N2.2C** Mentally add numbers: a 2-digit number and 1s; a 2-digit | compare simple properties of common 2D shapes; sort the shapes accordingly. **G2.2F** Recognise symmetry in shapes and objects with a vertical line of symmetry. | from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1B** Understand 0 and count on a number line. **N2.1C** Recognise patterns in digits when counting in | value of each digit in a 2-digit number (10s and 1s) and write numbers in expanded form. **N2.1H** Understand and use ordinal numbers to define position rather than amount. | numbers (and also 0) to objects, images or actions. **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in | numbers to 100 and write statements using inequality signs < or >. **G2.1A** Measure lengths/heights (cm and m) with standard units. **G2.1B** Choose appropriate |

| **Band 1** | | | | **Band 2** | | | |
|---|---|---|---|---|---|---|---|
| **Addition and Subtraction/ Multiplication and Division** | **Number and Place Value/ Measure** | **Number and Place Value/ Addition and Subtraction** | **Number and Place Value/ Addition and Subtraction** | **Number and Place Value/ Addition and Subtraction/ Measure** | **Measure/ Shape** | **Number and Place Value** | |
| Y 2/9 | Y 2/10 | Y 2/11 | Y 2/12 | Y 2/13 | Y 2/14 | Y 2/15 | |
| **N2.2A** Know number bonds for numbers up to and including 20. **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 1-digit number. | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 | **N2.1E** Recognise the place value of each digit in a 2-digit number (10s and 1s) and write numbers in expanded form. **N2.1F** Compare and order numbers to 100 and write statements using inequality signs | **N2.1E** Recognise the place value of each digit in a 2-digit number (10s and 1s) and write numbers in expanded form. **N2.2A** Know number bonds for numbers up to and including 20. **N2.2B** Recognise and work out | **N2.1B** Understand 0 and count on a number line. **N2.2A** Know number bonds for numbers up to and including 20. **N2.2B** Recognise and work out bonds for multiples of | **G2.1K** Tell the time on an analogue clock using quarter past and quarter to the hour. **G2.2A** Identify, describe and compare simple properties of common 2D shapes; sort the shapes | **N2.1B** Understand 0 and count on a number line. **N2.1E** Recognise the place value of each digit in a 2-digit number (10s and 1s) and write numbers in expanded form. | Revision and Assessment First Term Exam |

| YEAR 2 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|

| **Band 2** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Number and Place Value/ Multiplication and Divion/ Fractions** | **Number and Place Value/ Multiplication and Divion/ Fractions** | **Measure/ Statistics** | **Number and Place Value/ Multiplication and Divion/ Fractions** | **Number and Place Value/ Addition and Subtraction/ Measure** | **Number and Place Value/ Addition and Subtraction** | **Number and Place Value/ Addition and Subtraction** | **Number and Place Value/ Addition and Subtraction** |
| Y 2/16 | Y 2/17 | Y 2/18 | Y 2/19 | Y 2/20 | Y 2/21 | Y 2/22 | Y 2/23 |
| **N2.1B** Understand 0 and count on a number line. **N2.3A** Work out doubles up to and including 20. **N2.3B** Work out related halves for doubles up to and including 20. **N2.4C** Work out half of an even set of | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 and 10s from 0, from any number forwards and | **G1.1F** Recognise time in seconds, minutes and hours. **G2.1J** Know the meaning of 'month' and 'year' and say aloud months of the year. **G2.1K** Tell the time on an analogue clock using quarter past and quarter to the hour. **G2.1L** Know the number of hours in a day. | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1B** Understand 0 and count on a number line. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 and 10s from 0, from any | **N2.1F** Compare and order numbers to 100 and write statements using inequality signs < or >. **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1B** Understand 0 and count on a number line. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify | **N2.1D** Read and write numbers in words up to and including 20. **N2.1E** Recognise the place value of each digit in a 2-digit number (10s and 1s) and write numbers in expanded form. **N2.2A** Know number bonds for | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 and 10s from 0, from any |

| **Band 3** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Number and Place Value/ Measure/ Statistics** | **Number and Place Value/ Multiplication and Divion/ Fractions** | **Addition and Subtraction/ Measure** | **Number and Place Value/ Multiplication and Divion/ Fractions** | **Measure** | **Number and Place Value/ Addition and Subtraction/ Multiplication and Division/ Fractions** | **Number and Place Value/ Addition and Subtraction** | |
| Y 2/24 | Y 2/25 | Y 2/26 | Y 2/27 | Y 2/28 | Y 2/29 | Y 2/30 | |
| **G1.1B** Measure lengths/heights, mass/weight, capacity/volume with nonstandard units. **N2.1F** Compare and order numbers to 100 and write statements using inequality signs < or >. **G2.1C** Compare measures using simple | **N2.2B** Recognise and work out bonds for multiples of 10, up to and including 100. **N2.3A** Work out doubles up to and including 20. **N2.3B** Work out related halves for doubles up to and including 20. | **N2.2A** Know number bonds for numbers up to and including 20. **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number. **N2.2D** Mentally subtract numbers: | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 and 10s from 0, from any number forwards and backwards. **N2.3D** Solve 1-step problems involving | **G2.1A** Measure lengths/heights (cm and m) with standard units. **G2.1B** Choose appropriate standard units (cm or m) to use; compare, order and describe lengths/heights, where measures are in the same units, and record the results using | **N2.1A** Count in steps of 2 from 0, in steps of 5 from 0 and in steps of 10 from 0. **N2.1C** Recognise patterns in digits when counting in 2s from 0 (and so identify odd and even numbers), 5s from 0 and 10s from 0, from any | **N2.1B** Understand 0 and count on a number line. **N2.1E** Recognise the place value of each digit in a 2-digit number (10s and 1s) and write numbers in expanded form. **N2.1F** Compare and order numbers | Revision and Assessment Final Exam |

# YEAR 3  LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 3 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|

| **Term 1** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Y3M1** | **Y3M2** | **Y3M3** | **Y3M4** | **Y3M5** | **Y3M6** | **Y3M7** | **Y3M8** |
| **Mental addition and subtraction** | **Number and place value /Mental** | **Mental Multiplication and Division/** | **Calender/Time/3D shapes** | **Comparing and ordering 2 and** | **Doubling and halving numbers upto** | **Add and Subtract money/Add** | **Length /Weight/ Capacity** |
| **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N2.2D** Mentally subtract numbers: a 2-digit number; and 1s | **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N2.2D** Mentally subtract numbers: a 2-digit number and 1s | **N3.1B** Count from 0 in multiples of 3, 4, 50 and 100 **N3.3A** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables; recognise and work out | **G2.1I** Read and write days of the week **G2.1J** Know the meaning of 'month' and 'year' and say aloud months of the year **G2.1K** Tell the time on an analogue clock using quarter past and quarter to the hour **G2.2B** Recognise and say aloud the name of | **N2.2D** Mentally subtract numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N3.1A** Count beyond 100 and | **N3.3A** Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables; recognise and work out multiplication and division for the 3 and 4 multiplication | **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N2.2D** Mentally subtract numbers: | **G3.1A** Measure lengths (mm, cm and m), weights/masses (g and kg) and capacity (ml and l) with standard units **G3.1B** Choose appropriate standard units (mm or cm or m; g or kg; ml or l) to |

| **Term 1** | | | **Term 2** | | | | |
|---|---|---|---|---|---|---|---|
| **Y3M9** | **Y3M10** | **Y3M1** | **Y3M2** | **Y3M3** | **Y3M4** | **Y3M5** | |
| **Number line/ Round to the nearest** | **Multiplication/ Division with** | **Place value and ordering 2-digit** | **Recognise and sort multiples of 2,3,4,5** | **Fractions** | **Recognising angles/ 2-D** | **Mentally subtract** | **Revision** |
| **N2.2D** Mentally subtract numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N3.1A** Count beyond 100 and recognise patterns when counting across 100s | **N2.2C** Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N2.2D** Mentally subtract numbers: a 2-digit number and 1s | **N3.1A** Count beyond 100 and recognise patterns when counting across 100s boundaries to 1 000 **N3.1B** Count from 0 in multiples of 3, 4, 50 and 100 | **N3.1B** Count from 0 in multiples of 3, 4, 50 and 100 **N3.2A** Add several 1-digit and 2-digit numbers (up to and including 20) **N3.2B** Recognise and work out bonds for numbers to 100 | **N3.2I** Estimate numbers on a number line **N3.5A** Recognise, find and name unit fractions of a shape (for fractions with denominators up to and including 10) | **G2.2A** Identify, describe and compare simple properties of common 2D shapes; sort the shapes accordingly **G3.1A** Measure lengths (mm, cm and m), weights/masses (g and kg) and capacity | **N2.2D** Mentally subtract numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number **N3.1A** Count beyond 100 and | |

| YEAR 3 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|

| | | | | | Term 2 | | | Term 3 |
|---|---|---|---|---|---|---|---|---|
| | Y3M6 | Y3M7 | Y3M8 | Y3M9 | Y3M10 | Y3M1 | Y3M2 | Y3M3 |
| Term 2 | **Add two 3- digit numbers & 2 and 3** | **Add numbers with up to three** | **Time and Time intervals/Solve word** | **Mentally subtract numbers/Estimate** | **Doubling and Halving numbers** | **Add several one and two digit** | **Use function machine to multiply** | **Divide with and without** |
| | N3.1A Count beyond 100 and recognise patterns when counting across 100s boundaries to 1 000 N3.1C Read, write and say aloud numbers written in figures from 100 to 1 | N2.2C Mentally add numbers: a 2-digit number and 1s a 2-digit number and 10s a 2-digit number and a 2-digit number N3.1D Recognise the place value of each digit in a 3-digit number (100s, | G3.1M Show and write the times: o'clock, half past, quarter past and quarter to the hour G3.1N Know the number of minutes in one hour and the number of seconds in one minute | N3.1A Count beyond 100 and recognise patterns when counting across 100s boundaries to 1 000 N3.1C Read, write and say aloud numbers written in figures from 100 to 1 000 | N3.3A Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables; recognise and work out multiplication and division for the 3 and 4 multiplication | N3.2B Recognise and work out bonds for numbers to 100 N3.2C Mentally add numbers: a 3-digit number and 1s a 3-digit number and 10s a 3-digit number and 100s | N3.3A Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables; recognise and work out multiplication and division for the 3 and 4 multiplication | N3.2J Estimate the answer to a calculation Week 23 remainders; use the grid method to multiply 2-digit numbers by 3, 4 ,5 and 8; begin to estimate products |
| | | | | | Term 3 | | | |
| | Y3M4 | Y3M5 | Y3M6 | Y3M7 | Y3M8 | Y3M9 | Y3M10 | |
| Term 2 | **Barchart/Pictograms/Compare and** | **Addition and subtraction/Word** | **Column addition /Subtract using** | **Mentally subtract numbers on a** | **Parallel, perpendicular/Vertical** | **Grid method multiplication/** | **Addition/Subtraction/Multiplicati** | **Revision** |
| | N3.1F Compare and order numbers to 1 000 and write statements using inequality signs < or > G3.1A Measure lengths (mm, cm and m), weights/masses (g and kg) and | N3.2A Add several 1-digit and 2-digit numbers (up to and including 20) N3.2B Recognise and work out bonds for numbers to 100 N3.2C Mentally add numbers: a 3-digit number and 1s | N3.2D Mentally subtract numbers: a 3-digit number and 1s a 3-digit number and 10s a 3-digit number and 100s N3.2E Add numbers with two digits, using formal written methods of column | N3.2D Mentally subtract numbers: a 3-digit number and 1s a 3-digit number and 10s a 3-digit number and 100s N3.2F Add numbers with up to three digits, using formal written methods of column | G3.1M Show and write the times: o'clock, half past, quarter past and quarter to the hour G3.1N Know the number of minutes in one hour and the number of seconds in one minute | N3.2J Estimate the answer to a calculation N3.3A Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables; recognise and work out | N3.2A Add several one-digit and two-digit numbers (up to and including 20) N3.2B Recognise and work out bonds for numbers to 100 N3.2C Mentally add numbers: | |

## YEAR 4  LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 4 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | Yr 4/1 | Yr 4/2 | Yr 4/3 | Yr 4/4 | Yr 4/5 | Yr 4/6 | Yr 4/7 | Yr 4/8 |
| Term 1 | ADDITION/SUBTRACTION | | | FRACTIONS/DECIMALS/MEASURES | NUMBERS/PLACE VALUE/ADD/SUB | DECIMALS/FRACTIONS | DECIMALS | MEASURE/DECIMALS/WORD PROBLEMS/ |
| | N4.2A Know number bonds to 100 and recognise and work out bonds to the next 100. N4.2B Add and subtract integers with up to and including four digits using appropriate mental methods. | N4.1A Recognise patterns when counting across 1000s boundaries to 10 000. N4.1C Read, write and say aloud numbers written in figures from 1000 to 10 | 4.1A Recognise patterns when counting across 1000s boundaries to 10 000. N4.1B Count from 0 in multiples of 6, 8, 25 and 1000. N4.3A Recall and use multiplication and | N4.5A Know that 1/10 is written 0·1 as a decimal and relate tenths to place value and decimal measures. G3.1A Measure lengths (mm, cm and m), weights/masses (g and kg) and capacity (ml and l) with standard units. | N4.1D Recognise the place value of each digit in a 4-digit number (1000s, 100s, 10s, 1s) and write numbers in expanded form. N4.2C Add and subtract integers | N3.5A Recognise, find and name unit fractions of a shape (for fractions with denominators up to and including 10). N3.5D Compare and order unit fractions, and compare and order fractions with the same denominators (for | N4.1A Recognise patterns when counting across 1000s boundaries to 10 000. N4.2B Add and subtract integers with up to and including four digits using | G3.1E Estimate length/height, mass/weight, volume/capacity and time to the nearest appropriate unit. G4.1B Measure using knowledge of the number system including tenths |
| | Yr 4/9 | Yr 4/10 | Yr 4/11 | Yr 4/12 | Yr 4/13 | Yr 4/14 | Yr 4/15 | Revision |
| Term 1 | ROUNDING NUMBERS/ADD/SUBT/3D SHAP | PROBLEM SOLVING | ROUNDING/ADD/SUBT | FOUR OPERATIONS | FRACTIONS/MULTI/DIV | S/LINES/2-D SHAPES/SYMMETRY/COORDI | MULTI/DIV/MONEY | |
| | N4.1G Round any number to the nearest 10, 100 or 1000. N4.2B Add and subtract integers with up to and including four digits using appropriate mental methods. N4.2C Add and subtract integers with up | N3.3E Solve 1-step problems involving multiplying and dividing by 2, 3, 4, 5 and 10. N4.3E Use place value, known facts and partitioning to multiply and divide mentally. | N4.1A Recognise patterns when counting across 1000s boundaries to 10 000. N4.1B Count from 0 in multiples of 6, 8, 25 and 100. N4.1C Read, write and say aloud numbers | N4.2B Add and subtract integers with up to and including four digits using appropriate mental methods. N4.2C Add and subtract integers with up to and including four digits, using mental or formal written methods of column | N3.5E Recognise, find and name equivalent fractions (for fractions with denominators up to and including 10), using pictorial representations. N3.5H Recognise, find and name | G4.2A Identify acute, obtuse and reflex angles; order angles by size. G4.2B Identify pairs of perpendicular, parallel and equal length lines and know the geometric symbol for parallel and equal length lines. | N4.3A Recall and use multiplication and division facts for the 2, 3, 4, 5 and 10 multiplication tables, including multiples and factor pairs; recognise and | |

| YEAR 4 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | Yr 4/16 | Yr 4/17 | Yr 4/18 | Yr 4/19 | Yr 4/20 | Yr 4/21 | Yr 4/22 | Yr 4/23 |
| Term 2 | FOUR | ADD/SUBT/WORD PROBLEMS-MONEY | MEASURE/PROBLEM SOLVING/PERIMETER | NUMBERS/ADD/SUBT | NUMBERS/MULT/PROBLEM | NUMBERS/TEMPERATURE | MULTI/DECIMALS | MULTI/DIV/FACTORS/DOUBLE/HALVE/M |
| | N4.2C Add and subtract integers with up to and including four digits, using mental or formal written methods of column addition and subtraction, where appropriate. N4.3D Use known multiplication facts to | N4.2B Add and subtract integers with up to and including four digits using appropriate mental methods. N4.2C Add and subtract integers with up to and including four digits, using mental or formal written methods of | G4.1C Work out equivalents of measure for mm, cm and m (integer answers only). G4.1D Solve problems involving measure, including conversions, comparing, rounding and the four operations (integer | N4.1D Recognise the place value of each digit in a 4-digit number (1000s, 100s, 10s, 1s) and write numbers in expanded form. N4.2B Add and subtract integers with up to and including four digits using | N4.1A Recognise patterns when counting across 1000s boundaries to 10 000. N4.3E Use place value, known facts and partitioning to multiply and | G3.1G Compare, order, describe and record temperature (positive integers of degrees Celsius only). N4.1C Read, write and say aloud numbers in figures from 1000 to 10 | N4.3D Use known multiplication facts to multiply by multiples of 10 and 100. N4.5A Know that 1/10 is written 0·1 as a decimal and relate tenths to place | N4.3A Recall and use multiplication and division facts for the 2, 3, 4, 5 and 10 multiplication tables including multiples and factor pairs; recognise and work out multiplication and division for the 6 and 8 multiplication tables (up |
| | Yr 4/24 | Yr 4/25 | Yr 4/26 | Yr 4/27 | Yr 4/28 | Yr 4/29 | Yr 4/30 | Revision |
| Term 2 | APES/2D SHAPES/PERIMETER/AREA/SYM | FRACTIONS(ADD/SUB)/DECIMALS | ADD/SUBT/MUTIPLES/FACTORS/PROBLEM | D/SUBT/MUTIPLES/FACTORS/PROBLEM SOLVI | ATES/BAR CHARTS/LINE GRAPHS/PICT | MULTI/FRACTIONS/ADD/SUBT OF | NUMBERS/MULT/DIV (withor | |
| | G2.2D Identify, describe and compare the simple properties of common 3D shapes; sort the shapes accordingly. G2.2E Identify 2D shapes on the surface of 3D solids. G3.2C Draw 2D shapes (not to accurate | N3.5E Recognise, find and name equivalent fractions (for fractions with denominators up to and including 10), using pictorial representations. N3.5H Recognise, find and name equivalent fractions (for fractions with | N4.2B Add and subtract integers with up to and including four digits using appropriate mental methods. N4.2C Add and subtract integers with up to and including four digits, using mental or formal written methods of | N4.2B Add and subtract integers with up to and including four digits using appropriate mental methods. N4.2C Add and subtract integers with up to and including four digits, using mental or formal written methods of column | G4.3A Read, write and use coordinates in the first quadrant. S4.1A Interpret and represent data in bar charts and line graphs to show changes over time. | N4.3H Multiply 2-digit and 3-digit numbers by a 1-digit number using a formal written method. N4.5C Work out non-unit fractions (for fractions with denominators up to and including 10) of a quantity, using | N4.1A Recognise patterns when counting across 1000s boundaries to 10 000. N4.3E Use place value, known facts and partitioning to multiply and | |

## St. Mary's Catholic High School MATH (2019-2020)

## YEAR 5  LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 5 | TERM 1 WEEK 1 | TERM 1 WEEK 2 | TERM 1 WEEK 3 | TERM 1 WEEK 4 | TERM 1 WEEK 5 | TERM 1 WEEK 6 | TERM 1 WEEK 7 | TERM 1 WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | YR 5 | | GR5/2 | | GR5/3 | GR5/4 | | GR5/5 |
| | Number Skills | Number Skills | Number Skills | Number Skills | | Number Skills | Number Skills | Geometry |
| Term 1 | N5.1B Read, write and say aloud numbers written in figures from 10 000 to 100 000. N5.1C Recognise the place value of each digit in a 5-digit number (10 000s, 1000s, 100s, 10s, | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. | N4.3B Multiply and divide numbers by 1 and multiply by 0. N5.1A Count from 0 in multiples of 7, 9 and 11. N5.1D Relate ♡ ♡□□s and 0·01 to the place-value table. N5.3A Recall and use | G5.1B Convert between different metric units of measure (integer and tenths answers only).G5.1C Measure, compare, add and subtract: lengths (m/cm/mm); mass | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where | N5.1A Count from 0 in multiples of 7, 9 and 11. N5.3A Recall and use multiplication and division facts for the 2, 3, 4, 5, 6, 8 and 10 multiplication tables; recognise and | N5.3B Use known multiplication facts to multiply by multiples of powers of 10 up to 100 000. N5.3D Multiply numbers up to and including four digits by a 1- or 2- | G4.2A Identify acute, obtuse and reflex angles; order angles by size. G5.2A Know angles are measured in degrees; know that a full turn is 360°, a half turn is 180° and right angle is |

| Term 1 | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1s) and write numbers in expanded | N5.2B Use column addition to add | multiplication and division facts for the | (kg/g); volume/capacity (l/ml) (using | appropriate. N5.5L Read, write, | work out multiplication and division | digit number using a formal | 90°. |
| **TERM 1 WEEK 9** | **TERM 1 WEEK 10** | **TERM 1 WEEK 11** | **TERM 1 WEEK 12** | **TERM 1 WEEK 13** | **TERM 1 WEEK 14** | **TERM 1 WEEK 15** | **TERM 1 WEEK 16** |
| N5.1B Read, write and say aloud numbers written in figures from 10 000 to 100 000. N5.1C Recognise the place value of each digit in a 5-digit number (10 000s, 1000s, 100s, 10s, 1s) and write numbers in expanded | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. N5.2B Use column addition to add | N5.1B Read, write and say aloud numbers written in figures from 10 000 to 100 000. N5.1C Recognise the place value of each digit in a five-digit number (10 000s, 1000s, 100s, 10s, 1s) and write numbers in expanded form. N5.1D | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. N5.2C Estimate the answer to an addition or subtraction calculation. | N5.3A Recall and use multiplication and division facts for the 2, 3, 4, 5, 6, 8 and 10 multiplication tables; recognise and work out multiplication and division for the 7, 9 and 11 | S4.1A Interpret and represent data in bar charts and line graphs to show changes over time. G4.2E Identify and name equilateral and right-angled triangles. G5.1B Convert between different metric units of measure | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. N5.2B Use column | REVISION |

| YEAR 5 | **TERM 2 WEEK 1** | **TERM 2 WEEK 2** | **TERM 2 WEEK 3** | **TERM 2 WEEK 4** | **TERM 2 WEEK 5** | **TERM 2 WEEK 6** | **TERM 2 WEEK 7** | **TERM 2 WEEK 8** |
|---|---|---|---|---|---|---|---|---|
| Term 2 | GR5/9 | | Gr5/10 | Gr5/11 | | Gr5/12 | | GR5/13 | GR5/14 |
| | Number Skills | | Number Skills | Geometry | | Number Skills | | Number Skills | Number Skills(7)cont. |
| | N5.3D Multiply numbers up to and including four digits by a 1- or 2-digit number using a formal written method. N5.3E Divide numbers up to and including four digits by 1-digit numbers with integer answers. N5.3F | N5.3C Use place value, known and derived facts and partitioning to multiply and divide mentally. N5.3D Multiply numbers up to and including four digits by a 1- or 2-digit number using a formal written | G4.2A Identify acute, obtuse and reflex angles; order angles by size. G4.2B Identify pairs of perpendicular, parallel and equal length lines and know the geometric symbol for parallel and equal length lines. | N3.5I Understand whole and fractions of a whole (for fractions with denominators up to and including 10) as mixed numbers. N5.5C Compare fractions of quantities (where fractions have denominators up to and including 10) and write statements | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. N5.2B Use column | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. N5.2C Estimate the answer to an addition or | N5.3C Use place value, known and derived facts and partitioning to multiply and divide mentally. N5.3D Multiply numbers up to and including four digits by a 1- or 2-digit number using a formal | N5.1D Relate ♀ ♀□□s and 0·01 to the place-value table. N5.1H Use negative numbers in context of temperature and calculate temperature rise and fall, including across 0. N5.1I Order negative and positive numbers in |

| | **TERM 2 WEEK 9** | **TERM 2 WEEK 10** | **TERM 2 WEEK 11** | **TERM 2 WEEK 12** | **TERM 2 WEEK 13** | **TERM 2 WEEK 14** | **TERM 2 WEEK 15** | **TERM 2 WEEK 16** |
|---|---|---|---|---|---|---|---|---|
| Term 2 | G4.3 A Read, write and use coordinates in the first quadrant. G5.1C Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (using decimal measures with the same | N5.2A Add and subtract positive integers with up to and including five digits, using mental or formal written methods of column addition and subtraction, where appropriate. N5.2D Understand when to add and | N5.3A Recall and use multiplication and division facts for the 2, 3, 4, 5, 6, 8 and 10 multiplication tables; recognise and work out multiplication and division for the 7, 9 and 11 multiplication tables (up to 10 × ...); be able to identify multiples | N5.3D Multiply numbers up to and including four digits by a 1- or 2-digit number using a formal written method.N5.3E Divide numbers up to and including four digits by 1-digit numbers with integer answers. | G5.1C Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (using decimal measures with the same number of decimal places, up to | N5.5D Recognise and show families of equivalent fractions, using visual support. G5.1A Solve problems involving money calculations, using addition and subtraction (integer and decimal answers). | G4.1M Compare, order, describe and record temperature (positive and negative integers of degrees Celsius). S4.1A Interpret and represent data in bar charts and line graphs to show changes over | **REVISION** |

## YEAR 6  LONG  TERM  PLAN  with CURRICULUM  STANDARDS

| YEAR 6 | **WEEK 1** | **WEEK 2** | **WEEK 3** | **WEEK 4** | **WEEK 5** | **WEEK 6** | **WEEK 7** | **WEEK 8** |
|---|---|---|---|---|---|---|---|---|
| Term 1 | Term 1 | Term 1 | Term 1 | Term 1 | Term 1 | Term 1 | Term 1 | Term 1 |
| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | week 6 | Week 7 | Week 8 |
| | N6.1B Read, write and say aloud numbers written in figures up to and including 10 000 000. N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. | N6.2A Add and subtract positive integers of any size up to and including 1 000 000 using mental or formal written methods of column addition and subtraction, where appropriate.N6.2B | N5.4B Introduce BIDMAS (order of operations) for +, −, ×, ÷ only. N6.2A Add and subtract positive integers of any size up to and including 1 000 000 using mental or formal written methods of column addition and | G5.1F Convert between 12-hour time and 24-hour time. G5.1G Solve problems involving time, including converting between 12-hour and 24-hour time. N5.4B Introduce BIDMAS (order of | G5.1F Convert between 12-hour time and 24-hour time. G5.1G Solve problems involving time, including converting between 12-hour and 24-hour time. | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in | N4.5F Add fractions with the same denominator (for fractions with denominators up to and including 10) to give a total greater than 1. N5.5G Add a mixed number and a fraction where both have the same | G5.2E Identify, describe and compare simple properties of common 3D solids; sort the shapes accordingly. N6.8A Use formal algebraic notation to express missing number problems. N6.8B Solve problems by using simple |

| | Term 1 | Term 1 | Term 1 | Term 1 | term 1 | term 2 | Term 1 | term 2 |
|---|---|---|---|---|---|---|---|---|
| Term 2 | Week 9 | week 10 | week 11 | week 12 | week 13 | week 14 | week 15 | week 16 |
| | N6.3A Recall multiplication and division facts for multiplication tables up to and including 12 × 12; identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers within these | N6.2D Estimate the answer to a money calculation. N6.3D Estimate the answer to a multiplication involving a 1- or 2-place decimal and a whole number. N6.3E Multiply decimals with 1 or 2 | N6.4B Use inverse operations and estimation to check calculations. N6.5B Identify, name and write equivalent fractions of a given fraction (with denominators up to and including 10). N6.5D Simplify fractions using common | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1D Know that 1 million is 1 and six 0s, 2 million is 2 and six 0s and so on up to 10 million. | N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in expanded form. N6.1F Compare and order numbers up to and including 10 000 000 and | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in | G5.2G Identify, describe and compare simple properties of triangles and quadrilaterals; sort the shapes accordingly. N6.4C Sustain a line of enquiry; make | Revision |

| YEAR 6 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Term 2 | term 2 | term 2 | term 2 | term 2 | Term 2 | Term 2 | Term 2 | Term 2 |
| | week 1 | week 2 | week 3 | week 4 | week 5 | Week 6 | Week 7 | Week 8 |
| | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1D Know that 1 million is 1 and six 0s, 2 million is 2 and six 0s and so on up to 10 million. | N5.3K Identify prime numbers up to 100. N6.3F Divide numbers up to and including four digits by 1-digit numbers with remainders written as fractions. N6.3H Divide numbers up to four digits | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in | G6.2A Know that angles on a straight line add up to 180°, and find one missing angle on a straight line; recognise that angles where they meet at a point are on a straight line and use this to find missing angles; recognise | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each digit in a number with 1 or 2 | N6.4C Sustain a line of enquiry; make and test a hypothesis. N6.4D Look for patterns and write rules; use a systematic approach. N6.5A Work out unit and non-unit fractions (with denominators up to and | N6.1B Read, write and say aloud numbers written in figures up to and including 10 000 000. N6.1C Recognise the place value of each digit in a 6-digit number and write | N5.4B Introduce BIDMAS (order of operations) for +, −, ×, ÷ only. N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each |

| | term 2 | Term 2 | Term 2 | Term 2 | Term 2 | Term 2 | Term 2 | |
|---|---|---|---|---|---|---|---|---|
| Term 2 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | week 14 | week 15 | MOCK EXAMS |
| | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in | N6.1H Round any decimal, up to and including 2 decimal places, to the nearest whole number. N6.2D Estimate the answer to a money calculation. N6.3F Divide numbers up to and | G5.1C Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (using decimal measures with the same number of decimal places, up to and including 2 decimal places). | G4.2A Identify acute, obtuse and reflex angles; order angles by size. G6.1F Find perimeters of regular and irregular polygons by measuring and by calculating. G6.1G Recognise and use the formula for | N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1D Know that 1 million is 1 and six 0s, 2 million is 2 and six 0s and | N6.3A Recall multiplication and division facts for multiplication tables up to and including 12 × 12; identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers within these | Revision | |

## YEAR  7  LONG  TERM  PLAN  with CURRICULUM  STANDARDS

| YEAR7 | **WEEK 1** | **WEEK 2** | **WEEK 3** | **WEEK 4** | **WEEK 5** | **WEEK 6** | **WEEK 7** | **WEEK 8** |
|---|---|---|---|---|---|---|---|---|
| | YR7/1 | YR 7/2 | YR7/3 | YR7/4 | YR7/5 | YR7/6 | YR7/7 | YR7/8 |

## YEAR 7

| | Unit2-Number Skills | Unit2-Number Skills | Unit3-Equations /formulae | Unit3-Equations /formulae | Unit7-Equations | Unit7&4-Equations&Fractions | Unit4-Fractions | Unit5-Angles and shapes |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | Factors,primes and multiples.HCF & LCM using venn diagram.Using negative numbers | Squares and square roots.More powers and roots. Using formulae (Revision: Multiplying and dividing) | Using formulae and Writing formulae (Revision: Simplifying and writing algebric expression) | Brackets and powers, Factorising expressions + Assessment | Solving two-step equation and more complex equation(Revision: Solving one-step equation) | Trial & improvement, use division to write a fraction as a decimal (Revision- Working with fractions, Adding & subtracting fractions) | Multiplication and division of fraction, Working with mixed numbers | Angles and parallel lines,Use the properties of triangles to work out unknown angles + Assessment |

| | YR7/9 | YR 7/10 | YR7/11 | YR7/12 | YR7/13 | YR7/14 | YR7/15 | |
|---|---|---|---|---|---|---|---|---|
| | Unit5-Angles and shapes | Unit1- Analysing and Displaying data | Unit1- Analysing and Displaying data | Unit9-Perimeter,area and volume | Unit9&3(in Delta2) | Unit3(delta2)-3dsolids | Revision | |
| **Term 1** | Quadrilaterals, Interior and exterior angles of a Polygons, Geometrical proofs | Compare the sets of data using averages and range, Grouped data | Interpret and draw line graphs and pie charts + Assessment | Area of triangles,parallelograms & trapezium,Area and perimeter of compound shapes (Revision:Properties of 3D solids) | Surface area & Volume of cube, cuboid and triangular prism | Area and circumference of a circle,Area and perimeter of quarter circle and semi circle | Reinforce all the concepts taught and discuss the worksheets. | |

| YEAR 7 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | YR7/16 | YR7/17 | YR7/18 | YR7/19 | YR7/20 | YR7/21 | YR7/22 | YR7/23 |
| | Unit6-Decimals(5) | Unit6-Decimals(5) | Unit8 Multiplicative Reasoning | Unit8 Multiplicative Reasoning | Unit10-Sequences and graphs | Unit10-Sequences and graphs | Unit4(delta2)-Real life graphs | Delta2 Unit8 Probability |
| **Term 2** | Rounding decimals, Multiplying decimals(Revision ordering decimals, Addition and subtraction of decimals) | Division of decimals and recurring decimals (Revision:Fractions,decimals and percentage) | Writing ratios, Share a quantity in 2 or more parts in a given ratio,Proportion | Direct and inverse proportion/Using the unitary method + assessment | Sequences, The nth term,Pattern sequences | Coordinates and line segments, Straight line graphs parallel to the x-axis | Draw and interpret distance-time graph,Interpret graphs that are curved | Comparing probabilities, Mutually exclusive events, Estimating probability |

| | YR7/24 | YR7/25 | YR7/26 | YR7/27 | YR7/28 | YR7/29 | YR7/30 | |
|---|---|---|---|---|---|---|---|---|
| | Delta2 Unit8 Probability | Unit7(delta2)-Constructions | Unit7(delta2)-Constructions | Unit 5 Delta2 Transformations(5) | Contd Transformations(5) | Contd Transformations(5) | Revision | |
| **Term 2** | Experimental probability,Probability diagrams + Assessment | Accurate drawings, Construct triangles using a ruler and compasses(SAS, SSS, ASA) | Construct perpendicular bisector and Angle bisector using a rular and compasses | Describe and carry out Translations/Describe and carry out Reflections + Assessment | Describe and carry out rotations. Enlarge a shape and desribe an enlargement | Enlargements a shape using negative scale factor and fractional scale factor | Reinforce all the concepts taught and discuss the worksheets. | |

# YEAR 8  LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 8 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | YR 8/ 1 | YR 8/ 2 | YR 8 /3 | YR 8 /4 | YR 8/ 5 | YR 8/ 6 | YR 8/7 | YR 8/8 |
| | UNIT 1: Factors and powers (Delta2) | UNIT 1: Factors and powers (Delta2) | UNIT 1: Factors and powers (Delta2) | rs and Roots(Delta 3)UNIT 2 :Working with po | UNIT 2 :Working with | UNIT6:Fractions,Percentages and Decimals(Delta 2) | | 6:Fractions,Percentages and Decimals(De |
| **Term 1** | Prime factor decomposition of a number.To find HCFand LCM using venn diagrams.Solving word problem in HCFand LCM. | To work out laws of indices for positive powers.To use laws of indices from multiplying and dividing. | To use and understand powers of 10. To calculate with powers. Round to a number of significant figures. | To write the numbers using Standard form. Simplifying algebraicexpressions. involving powers and brackets+Assessment | To use the index laws in algebraic calculations and expressions. Using Index Laws with zero and negative powers. | Change a recurring decimal into a fraction. To calculate percentages .To work out an original quantity before percentage increase and decrease. | | To calculate percentage change. To calculate the effect of repeated percentage changes+ Assessment |

| | YR 8/ 9 | YR 8/ 10 | YR 8/11&12 | | YR 8/13&14 | | YR 8 | |
|---|---|---|---|---|---|---|---|---|
| | UNIT 2 :Working with powers(Delta 2) | UNIT 2:Quadratics(Delta 3) | UNIT 7: Construction and Loci (Delta 2) | | 0 | Unit 3:3D Solids(Delta 2) | Week 15 and Week 16 | |
| **Term 1** | Factorise an algebraic expressions.To substitute integers into expressions. To construct and solve equations+Assessment | To multiply pairs of brackets.Square a linear expression.Using quadratic identities+Assessment | Accurate drawings.Construct triangles.Constructing perpendicular bisectors and angle bisectors. Draw Locus. Use loci to Solve problems. | | Surface area of prisms,Volume of prisms,Circumference and Area of a circle. | Surface area of Cylinders,Volume of Cylinders and Pythagoras Theorem. | REVISION | |

| YEAR 8 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| | YR 8/17&18 | | YR 8/19&20 | | YR 8/21&22 | | YR 8/23&24 | |
| | UNIT 5:Arcs and Sectors of circles(Delta 3) | UNIT 4:RealLife | Unit 9:Scale Drawing and Measures(Delta 2) | | Unit 9:Scale Drawing and | UNIT 3: Inequalities,equations and | Unit 10:Graphs(Delta 2) | |
| **Term 2** | Work out the length of an arc.Work out the area of a sector.Solve problem involving arc and sector. | Draw and interpret Distance-time graphs, Interpret real life graphs. | Maps and scales.Bearings. Scales and ratio.Congruent and similar shapes. | | To use similiarity to solve problems in 2D shapes+Assessment | To construct and solve complex equations.Changing the subject of a formulae. | Plotting linear graphs,The gradient,y=mx+c,Parallel and perpendicular lines+Assessment | |

| | YR 8/25 | YR 8/26 | YR 8/27 | YR 8/28&29 | | YR 8/30 | YR 8 | |
|---|---|---|---|---|---|---|---|---|
| | UNIT 8:Probability(Delta 2) | Unit 4:Collecting and Analysing Data(Delta 3) | | Unit 5: Transformations(Delta 2) | | Unit 8: Simultaneous Equations(Delta 3) | Week 31 and Week 32 | |
| **Term 2** | Revision + Estimating probability, probability diagrams | To draw stem and leaf diagrams. To construct frequency polygons. To estimate the mean and range from a grouped frequency table. | | To describe and carry out Reflection, Translation & Rotation.To enlarge a shape ,To describe an enlargement.To enlarge a shape using negative and fractional scale factor. | | Solve a pair of Simultaneous Equation | REVISION | |

| YEAR 9 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | YR 9 /1 | YR 9/2 | YR 9/3 | YR 9/4 | YR 9/5 | YR 9/6 | YR 9/7 | YR 9 /8 |
| | Number ( 6 ) | Number Contd (6) | Number Contd (5) +Assessment | Algebra (6) | Algebra Contd (6) | Algebra Contd (6) | Algebra Contd (5) + Assessment(2) | Fractions,ratio and percentages (6) |
| | Place value and estimating,HCF and LCM. Calculating with powers (indices). | Calculating with powers (indices) Zero,negative and fractional indices. To write a number in standard form. | To calculate with numbers in standard form.Understand the difference between rational and irrational numbers.Simplify a surd. Rationalise a denominator. | To solve sums involving algebraic indices.To expand brackets.To factorise algebraic expressions. | To solve equations involving brackets and numerical fractions.To substitute numbers into fomulae | .To rearrange formulae. To solve sums on linear sequences.To solve problems using non linear sequences. To work out terms in Fibonacci . like sequences | To expand the product of. two brackets To use the difference of. two squares. To factorise quadratics of the. form ax²+bx+c | To add subtract multiply divide fractions and mixed numbers.To compare ratios.To find quantities using ratios. |
| **Term 1** | YR 9 /9 | YR 9/10 | YR 9/11 | YR 9/12 | YR 9/13 | YR 9/14 | YR 9/15 & YR9/16 | |
| | Fractions,ratio and percentages Contd (6) | Fractions,ratio and percentages Contd (6) | Interpreting and representing data Contd (6) | Angles and Trigonometry (6) | Angles and Trigonometry (6) | Angles and Trigonometry Contd (6) | Revision | |
| | To convert between currencies and measures.To use direct proportion.To work out percentage increase and decrease. | To solve real - life problems involving percentages. Calculate using fractions,decimals and percentages.To convert a recurring decimal to a fraction | Estimate the mean and range from a grouped frequeency table.To find the modal class and the group containing the median.To construct and use two-- way tables. | To derive and use angle properties of triangles,quadrilateral and exterior angle of triangle.To calculate the sum of the interior angles and exterior angles of a polygon to solve problems. | To solve problems involving Pythagoras theorem. Introduction of trigonometric ratios | To use trignometric ratios to find the lengths and angles in a right angled triangle.To find angles of elevation and depression. | Reinforce all the concepts taught and discuss the revision worksheets. | |

| YEAR 9 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 2** | YR 9 /17 | YR 9/18 | YR 9/19 | YR 9/20 | YR 9/21 | YR 9/22 | YR 9/23 | YR 9 /24 |
| | Interpreting and representing data Contd (6) | Interpreting and representing data Contd (6) | erpreting and representing data Contd (5)+ Assessme | Graphs (6) | Graphs Contd (6) | Graphs Contd (6) | Graphs Contd (6) | Area and volume (6) |
| | To construct and use back -to-back stem and leaf diagrams.Construct and use frequency polygons and pie charts. | To plot and interpret time series graphs..To use trends to predict what might happen in the future.Moving Averages | To plot and interpret scatter graphs. To determine the linear. relationship between the variables Draw a line of best fit on a scatter graph.Use the line of best fit to predict values | To find the gradient and y intercept from a linear equation.To rearrange an equation into the form y=mx+c.To plot graphs with equations ax+by+c. | To find the equation of a line given its gradient and one point.To draw and interpret distance-time graphs.To calculate average speed from a distance - time graph. | To understand velocity - time graphs.To find acceleration and distance from velocity - time graphs.To draw and iterpret real - line linear graphs. | To find the coordinates of the midpoint of a line segment.To find the gradient and length of a line segment.To find the equations of lines parallel or perpendicular to the given line. | To find the perimeter and area of compound shapes.To calculate volumes and surface areas of prisms.Units and accuracy. |
| **Term 2** | YR 9 /25 | YR 9/26 | YR 9/27 | YR 9/28 | YR 9/29 | YR 9/30 | YR 9/31 & GR 9/32 | |
| | Area and volume Contd (6) | Area and volume Contd (6)) | Transformations and Constructions (6) | Transformations (6) | Probability (6) | Equations and Inequalities /Congruence(6) | Revision | |
| | .To calculate the area and circumference of a circle.To calculate the area and perimeter of semis circles and quarter circles.To calculate arc lengths,angles and areas of sectors of circles. | To calculate volume and surface area of a cylinder and a sphere. To calculate volume and surface area of a pyramids and cones | 3D solids.Reflection and Rotation.Enlarge shapes by fractional and negative scale factors about a centre of enlargement. | To draw scales on maps.To solve problems involvingbearings.Construction of angle bisector and perpendicular bisector.To draw a locus.Use loci to solve problems. | To solve problems on combined events.To find probabilities of mutually exclusive events. Experimental Probability.Independent events.To draw and use probability tree | To solve simple simultaneous equations algebraically and graphically.To know the conditions of congruence. | Reinforce all the concepts taught and discuss the revision worksheets. | |

# YEAR 10 LONG TERM PLAN with CURRICULUM STANDARDS

| YEAR 10 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | YR 10 /1 | YR 10 /2 | YR 10 /3 | YR 10 /4 | YR 10 /5 | YR 10 /6 | YR 10 /7 | YR 10 /8 |
| | Equations and inequalities(6) | Equations and Inequalities | Equations and inequalities (Continue)(6) | Equations and inequalities (Continue)(6) | Unit 7.2. Units and Accuracy , Unit | Unit 8.5 Bearings. 8.8 Loci | Revision on Unit 5.4-5.7 | More Trigonometry(6) |
| | Solve quadratic equations by factorisation, use the quadratic formula and by completing the square. (9.1 - 9.3) | Recognise and draw quadratic functions. Find approximate solutions to quadratic equations graphically.(15.3-15.4) | Solve simultaneous equations algebraicallyy and graphycally Solve quadratic simultanious. (9.4 - 9.6,15.2) | Solving linear inequalities and shading region. Solving quadratic inqualities. (9.7, 15.2) | ● Convert between metric units of area. ● Calculate the maximum and minimum possible values of a measurement. ● Convert between metric units of area. | ● Draw and use scales on maps and scale drawings. ● Solve problems involving bearings. ● Draw a locus. ● Use loci to solve problems | Revision on Pythagoras theorm and Trigonometry | Find the area of a triangle and a segment of a circle. Use the sine rule to solve 2D problems. . |
| **Term 1** | YR 10 /9 | YR 10 /10 | YR 10 /11 | YR 10 /12 | YR 10 /13 | YR 10 /14 | YR 10 /15 | |
| | More Trigonometry (Continued) (6) | Similarity and congruence(4) | Similarity and congruence(4) | Circle theorems (Continue) (6) | Circle theorems (Continue) (6) | Revision of Year 9 topics(6) | Revision(12) | |
| | Use the cosine rule to solve 2D problems. Solve bearings problems using trigonometry. | To show that two triangles are congruent.To know the conditions of congruence.To prove shapes are congruent.To solve problems involving congruence(12.1-12.2) | To use the ratio of corressponding sides to work out scale factors.To find missing lengths on similar shapes (12.3-12.4 till Q9) | Understand about tangents at a point and from a point. Prove and use facts about angles subtended at the centre and the circumference, angle in a semicircle and angles subtended at the circumference of a circle. | Understand, prove and use facts about cyclic quadrilaterals and alternate segment theorem.Solve angle problems using circle theorems. Give reasons for angle sizes using mathematical language. Find the equation of the tangent to a | Revision topics from Year 9 [Numbers, Algebra,interpreting and repesenting data,fractions,ratio and percentages Angles and polygons,Transformations and constructions] | Reinforce all the concepts taught and discuss the worksheets for first summative exam | |

| YEAR 10 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 2** | YR 10 /16 | YR 10 /17 | YR 10 /18 | YR 10 /19 | YR 10 /20 | YR 10 /21 | YR 10 /22 | YR 10 /23 |
| | Vectors and geometric proof (6) | Vectors and geometric proof (6) | Vectors and geometric proof (6) | Further statistics (6) | Further statistics (6) | Probability(6)) | Probability(6) | Probability(6) (contd) |
| | Understand and use vector notation. ● Calculate using vectors and represent the solutions graphically. ● Calculate the resultant of two vectors. . | ● Solve problems using vectors. ● Use the resultant of two vectors to solve vector problemsExpress points as position vectors . | ● Prove lines are parallel. ● Prove points are collinear● Solve geometric problems in two dimensions using vector methods. ● Apply vector methods for simple geometric proofs | Understand simple random sample and stratifi ed sample. Draw and interpret cumulative frequency tables. | Work out the median, quartiles and interquartile range from a cumulative frequency diagram. Draw and interpret box plots. (14.1 - 14.3 | ● Use the product rule for finding the number of outcomes for two or more events. ● Identify mutually exclusive outcomes and events. ● Find the probabilities of mutually exclusive outcomes and events. ● Find the probability of an event not | ● Work out the expected results for experimental and theoretical probabilities. ● Compare real results with theoretical expected values to decide if a game is fair Draw and use frequency trees. Draw and use probability tree diagrams | ● Draw and use tree diagrams without replacement. ● Use two-way tables to calculate conditional probability Venn diagrams to calculate conditional probability. Use set notation |
| **m 2** | YR 10 /24 | YR 10 /25 | YR 10 /26 | YR 10 /27 | YR 10 /28 | YR10/29 | YR 10 /30 | |
| | Area and volume(6) | Algebra (6) | Graphs(6) | Similarity and congruence(6) | Multiplicative reasoning(6) | Multiplicative reasoning(6) | Revision(12) | |
| | Solve problems involving volumes and surface areas. | Solve problems using geometric sequences. Work out terms in Fibonnaci-like sequences. | Draw and interpret distance–time graphs. Average speed from a distance–time graph. Velocity–time graphs. | Similarity and congruence(6) | Find an amount after repeated percentage changes, growth and decay | Solve problems involving compound | Reinforce all the concepts taught and discuss the worksheets including revision topics of year 9 { Unit 1- Unit 8] for final exam | |

| | | | | | |
|---|---|---|---|---|---|
| Calculate volume and surface area of pyramids and cones. | Find the nth term of a quadratic sequence (2.6) | velocity–time graphs. Acceleration and distance from velocity–time graphs. | Use the link between linear scale factor and area scale factor to solve problems. ● Use the link between scale factors for length, area and volume to solve problems | percentage changes: growth and decay, rates. Convert metric speed measures. Compound measures, ratio,direct and indirect proportion. | Solve problems involving compound measures. Use relationships involving ratio. Use direct and indirect proportion |

## YEAR 11    LONG TERM PLAN  with CURRICULUM STANDARDS

| YEAR 11 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | YR11/1 | YR11/2 | YR11/3 | YR11/4 | YR11/5 | YR11/6 | YR11/7 | |
| | Unit 13More Trigonometry(7) | More Trigonometry(contd) (3) | More Trigonometry(contd)(5) | Unit19Proportion and Graphs(6) | More Trigonometry(6) | Unit6Graphs(5) | Proportion and Graphs(8) | |
| | Use upper and lower bounds in calculations, Calculating areas and the sine rule, The cosine rule and 2D trigonometric problems | Solving problems in 3D | Graphs of sine, cosine and tangent functions. Assessment - 1 Unit 13 and Revision topics Unit 5 | Translating, Reflecting and Stretching graphs of functions | Reflecting, translating and stratching Trigonometric curves, Solve equations. Assessment - 2 Transformation | D/T, V/T and More real life graphs | Calculate the gradient of a tangent at a point, Estimate the area under a non linear graph. Assessment 3 | |
| **Term 1** | YR11/8 | YR11/9 | YR11/10 | YR11/11 | YR11/12 | YR11/13 | YR11/14 | |
| | Unit 15 Equations and graphs(5) | Unit 14 Further Statistics(5) | Further Statistics(5) | Unit 17More Algebra(5) | Unit11Multiplicative Reasoning(5) | Unit 7Area and Volume (5) | Revision | |
| | To find an accurate root of a quadratic and cubic equation by using iterative process. Assessment - revision unit 9 and unit 15 | Sampling, cumulative frequency, box plots | Drawing and interpreting Histograms, comparing and describing population Assessment revision units - 1,2,4, | Algebraic fractions, surds, solving algebraic fraction equations , functions | Growth, decay, compound measures, ratio and proportion | Prisms, circles, sectors of circles, cylinders and spheres, pyramids and cones | Reinforcing all the concepts done and discussion of past papers. | |

| YEAR 11 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 2** | YR11/15 | YR11/16 | YR11/18 | YR11/19 | YR11/20 | YR11/21 | YR11/21 | YR11/22 |
| | Unit16Circle Theorems(5) | Unit18Vectors and Geometric Proof(5) | Unit10Probability(5) | Unit12Similarity and Congruence(5) | Similarity and Congruence(5) | Unit3Interpreting and representing data (5 | Unit8Transformation and | Transformation and Constructions |
| | To prove and apply all the circle theorems | Vector Arithmetic, Parallel and collinear vectors, Solving geometric problems Assessment 1 | Mutually exclusive, Independent events, Experimental probbaility, conditional probability, venn diagrams and set notation | Similar , Congruent triangles, | similarity in 3D shapes. Assessment 2 | Time series, scatter diagrams, line of best fit, averages and range | Reflection, Translation, enlargement and Rotation, Bearings and scale drawings | Constructions and loci |
| **Term 2** | YR11/ | | | | | | | |
| | Revision | | | | | | | |
| | Reinforcing all the concepts taught. Disussion of sample papers and mock papers. | | | | | | | |

## YEAR 12    LONG TERM PLAN  with CURRICULUM STANDARDS

| YEAR 12 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | Y12 / 1 (3) | Y12 / 2 (3) | Y12 / 2 (2) & 3 (1) | Y12 / 3 (3) | Y12 / 4 (3) | Y12 / 4 (2) & 5 (1) | Y12 / 5 (2) & 6 (1) | Y12 / 6 (3) |
| | Algebraic Expressions | Quadratics | Quadratics & Equations and inequalities | Equations and inequalities | Graphs and Transformations | Graphs and Transformations & Straight | Straight Line Graphs & Cirlces | Cirlces |
| | Expanding Brackets and Factorising, Index Laws, Negative and Fractional Indices, Surds and Rationalising denominators | Solving Quadratic Equations by (i) Factorising (ii) Quadratic Formula, Completing the square, Functions and Sketching Quadratic graphs | Finding the nature of roots using Discriminant, Modelling with quadratics, Solving Linear simultaneous equations, Solving Quadratic Simultaneous equations | Representing simultaneous equations on graphs, Solving Linear Inequalities, Solving Quadratic inequalities, Inequalities on graphs, Regions | Sketching cubic graphs, Sketching Reciprocal Graphs, Sketching Quartic Graphs, Sketching curves to find point of intersection | Translation of graphs, Stretching and reflecting Graphs, Transforming functions & Gradient and Equation of the line | Parallel and Perpendicular lines, Length and area, Modelling with straight lines & Midpoint and Perpendicular Bisectors, Equation of a circle | Intersection of straight lines and circles, Use tangent and Chord Properties, Circles and triangles |
| **Term 1** | Y12S1 / 1 (3) | Y12S1 / 2 (3) | Y12S1 / 2 (3) | Y12S1 / 2 (3) | Y12S1 / 3 (3) | Y12S1 / 3 (3) | Y12S1 / 4 (3) | Y12S1 / 4 (3) |
| | Data collection | Measures of location and spread | Measures of location and spread | Measures of location and spread | Representation of data | Representation of data | Correlation | Correlation |
| | Population and samples, Sampling, Non random sampling, Types of data, Large data set. | Measure of central tendency: Mean Median Mode and Quartiles. | Percentile, Measures of spread, Variance and standard deviation. | Variance and standard deviation and Coding. | Outliers, Box plots and Cumulative frequency. | Histogram with unequal intervals and Comparing data. | Scatter Diagram and Correlation, Linear regression | Interpretation of regression line and gradient. |

| YEAR 12 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | Y12 / 7 (3) | Y12 / 7 (1) & 8 (2) | Y12 / 8 (2) & 9 (1) | Y12 / 9 (3) | Y12 / 10 (3) | Y12 / 10 (3) | | |
| | Algebraic Methods | Algebraic Methods & Binomial | Binomial Expansion & Trigonometric Ratios | Trigonometric Ratios | Trigonometric Identities and | Trigonometric Identities and Equations | Revision | Revision |
| | Algebraic fractions, Dividing polynomials, Factor theorem, Mathematical Proof | Methods of proof & Pascal's triangle, Factorial Notation and Binomial Expansion | Solving binomial problems, Binomial Estimation & Cosine Rule , Sine Rule | Area of triangle, Solving triangle problems, Graphs of Sine, Cosine, Tangent, Transforming trigonometric graphs | Angles in all four quadrants, Exact value of trigonometrical ratios, Trigonometric identities | Simple trigonometric equations, Harder trigonometric equations, Equations and Identities | | |
| | Y12S1 / 5 (3) | Y12S1 / 5 (3) | Y12S1 / 5 (3) | Y12S1 / 6 (3) | Y12S1 / 6 (3) | Y12S1 / 6 (3) | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Term 1** | Probability | Probability | Probability | Statistical Distributions | Statistical Distributions | Statistical Distributions | Revision |
| | Calculating Probabilities and Venn Diagrams. | Mutually exclusive and Independent events. | Tree diagrams and Conditional Probability | Probability Distributions | Binomial Distribution | Cumulative Probabilities | Revision |

| YEAR 12 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 2** | **Y12 / 11 (3)** | **Y12 / 11 (2) & 12 (1)** | **Y12 / 12 (3)** | **Y12 / 12 (3)** | **Y12 / 12 (3)** | **Y12 / 13 (3)** | **Y12 / 13 (3)** | **Y12 / 13 (2) & Y12 / 14 (1)** |
| | Vectors | Vectors & Differentiation | Differentiation | Differentiation | Differentiation | Integration | Integration | Integration |
| | Vector notation, Representing as column vectors, Magnitude and direction and Position vectors. | Solving geometric problems, modelling with vectors & Gradient of curve, Finding the derivative, Differentiating $x^n$ | Differentiating quadratics, functions with two or more terms, Tangents and normals | Increasing and decreasing functions, Second order derivatives, Stationary points, Maximum and minimum points | Sketching gradient functions, Modelling with differentiation. | Integrating $x^n$, Indefinite integrals, Finding functions using integration | Definite integrals, Areas under the curve, Areas under the x axis | Area between curve and line & Exponential Functions |
| **Term 2** | **Y12S1 / 7 (3)** | **Y12S1 / 7 (3)** | **Y12S1 / 7 (3)** | **Y12S2 / 1 (3)** | **Y12S2 / 1 (3)** | **Y12S2 / 2 (3)** | **Y12S2 / 2 (3)** | **Y12S2 / 2 (3)** |
| | Hypothesis Testing | Hypothesis Testing | Hypothesis Testing | Regression, Correlation and Hypothesis | Regression, Correlation and | Conditional Probability | Conditional Probability | Conditional Probability |
| | Test Statistic, Null and Alternative Hypothesis and Finding Critical Values. | One tailed test, Comparing significance level and finding critical region. | Two tailed test, Comparing significance level and finding critical region. | Exponential Models and Measuring correlation. | Hypothesis Testing for zero correlation. | Set Notation, Conditional Probability. | Conditional Probabilities in Ven diagrams. | Probability Formulae |

| YEAR 12 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 2** | **Y12 / 14 (3)** | **Y12 / 14 (3)** | **Y12 / 14 (3)** | **Y13 / 1 (3)** | **Y13 / 1 (2) & Y13 / 5 (1)** | **Y13 / 5 (3)** | | |
| | Exponentials and Logarithms | Exponentials and Logarithms | Exponentials and Logarithms | Algebraic Methods | Algebraic Methods | Radian Measure | Revision | Revision |
| | Graph of $y = e^x$, Exponential modelling, Logarithms, | Laws of logarithms , Solving equations using logarithms. | Working with natural logarithms, Logarithms and non linear data. | Proof by contradiction, algebraic fractions | Partial Fractions, Repeated Factors and Algrbraic division & Radian Measure, Arc length. | Area of sector and segment, Solving trigonometric equations and Small Angle Approximation. | | |
| **Term 2** | **Y12S2 / 2 (3)** | **Y12S2 / 3 (3)** | **Y12S2 / 3 (3)** | **Y12S2 / 3 (3)** | **Y12S2 / 3 (3)** | **Y12S2 / 3 (3)** | | |
| | Conditional Probability | Normal Distribution | Normal Distribution | Normal Distribution | Normal Distribution | Normal Distribution | Revision | Revision |
| | Conditional Proabilities in Tree Diagrams. | Understanding normal distribution and its characteristics and Finding probabilities for normal distribbutions. | Inverse normal distribution function and Standard Normal Distribution. | Finding $\mu$ and $\sigma$ | Approximating a Binomial Distribution. | Hypothesis Testing with the Normal Distribution. | | |

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**YEAR 13 LONG TERM PLAN with CURRICULUM STANDARDS**

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| YEAR 13 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | **Y13 / 1 (2) & Y13 / 2 (1)** | **Y13 / 2 (3)** | **Y13 / 2 (3)** | **Y13 / 2 (1) & Y13 / 3(2)** | **Y13 / 3(3)** | **Y13 / 3 (3)** | **Y13 / 4 (3)** | **Y13 / 4 (1) & Y13 / 6 (2)** |
| | Algebraic Methods & Functions and | Functions and graphs | Functions and graphs | Functions and graphs & Sequences and series | Sequences and series | Sequences and series | Binomial Expansion | Binomial Expansion & Trigonometric |
| | Proof by contradiction & The modulus fuction | Functions and mappings, Sketching modulus functions | Composite functions, inverse functions and Combining transformations. | Solving modulus problems & Arithmetic Sequence and series | Geometric sequence and series, Sum to infinity. | Sigma Notation, recurrence relation and Modelling with series | Expanding $(1+x)^n$ and $(a+bx)^n$. | Using Partial Fractions to simplify the Binomial Expansion & Sketching and using Graphs of Sec x, Cosec x and Cot x in Trigonometric identities. |
| **Term 1** | **Y13M1 / 8 (3)** | **Y13M1 / 9 (3)** | **Y13M1 / 9 (3)** | **Y13M1 / 10 (3)** | **Y13M / 10 (3)** | **Y13M1 / 10 (3)** | **Y13M1 / 11 (3)** | **Y13M1 / 11 (3)** |
| | Modelling in Mechanics | Constant Acceleration | Constant Acceleration | Forces and Motion | Forces and Motion | Forces and Motion | Variable Acceleration | Variable Acceleration |
| | Constructing a model and modelling assumptions, Quantities and units and working with vectors. | Displacement-time graph, Velocity-time graph. | Constant Acceleration Formula 1 and 2, Vertical motion under gravity. | Force diagrams, Forces and vectors, Force and Acceleration. | Motion in 2 dimensions, Connected Particles. | Connected Particles and Pulleys. | Functions of time using differentiation, Maxima and Minima problems. | Using Integration and constant acceleration formula. |

| YEAR 13 | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | **Y13 / 6 (1) & Y13 / 7 (2)** | **Y13 / 7 (3)** | **Y13 / 7 (2) & Y13 / 8 (1)** | **Y13 / 8 (3)** | **Y13 / 9 (3)** | **Y13 / 9 (3)** | | |
| | Trigonometric Functions & | Trigonometry and modelling | Trigonometry and modelling & Parametric | Parametric Equations | Differentiation | Differentiation | Revision | Revision |
| | Inverse trigonometric functions & Using Angle Addition Formula and Double angle formula. | Solving trigonometric equations. Simplifying a cos x ± b sin x, Proving trigonometric identities | Modelling with trigonometric functions & Parametric Equations, Using trigonometric identities. | Curve Sketching, Points of intersection and modelling with parametric equations. | Differentiating exponentials and logarithms and trigonometric funtions. Chain rule, Product rule, Quotient rule | Parametric Differentiation, Implicit Differentiation using second derivatives, Rates of change. | | |

| | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
|---|---|---|---|---|---|---|---|---|
| **Term 1** | Y13M2 / 4 (3) | Y13M2 / 4 (3) | Y13M2 / 4 (2) & 5 (1) | Y13M2 / 5 (3) | Y13M2 / 5 (2) & 6 (1) | Y13M2 / 6 (3) | Y13M2 / 6 (3) | Y13M2 / 6 (1) & Test (2) |
| | Moments | Moments | Moments, Forces and Friction | Forces and Friction | Forces and Friction, Projectiles | Projectiles | Projectiles | Projectiles & Module Test |
| | Moments, Resultant Moments. | Equilibrium and Centre of mass. | Tilting & Resolving Forces | Inclined Planes and Friction | Friction & Horizontal Projection | Horizontal and Vertical Components, Projection at any angle. | Projection at any angle and Projectile Motion Formulae. | Projectile Motion Formulae & Module Test. |
| **YEAR 13** | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
| **Term 2** | Y13 / 11 (3) | Y13 / 11 (3) | Y13 / 11 (3) | Y13 / 10 (3) | Y13 / 12 (3) | Y13 / 12 (3) | | |
| | Integration | Integration | Integration | Numerical Methods | Vectors | Vectors | Revision | Revision |
| | Integrating standard functions, f(ax+b), Using trigonometric identities, reverse chain rule | Integration by substitution, Integration by parts, Partial fractions, | Finding areas, trapezium rule, solving differential equations, modelling with differential equations. | Locating roots, Iteration, The Newton Raphson method, Applications to modelling. | 3D coordinates, vectors in 3D, Solving geometric problems. | Application to Mechanics. | | |
| **Term 2** | Y13M2 / 7 (3) | Y13M2 / 7 (3) | Y13M2 / 7 (3) | Y13M2 / 7 (3) | Y13M2 / 8 (3) | Y13M2 / 8 (3) | Y13M2 / 8 (3) | Y13M2 / 8 (1) + Test (2) |
| | Applications of Forces | Applications of Forces | Applications of Forces | Applications of Forces | Further Kinematics | Further Kinematics | Further Kinematics | Further Kinematics & Module Test |
| | Static Particles, Modelling with statics. | Friction and Static Particles, Static Rigid Bodies. | Static Rigid Bodies, Dynamics and inclined Planes. | Dynamics and inclined Planes and Connected Particles. | Vectors in Kinematics and Vector Methods and projectiles. | Vector Methods and projectiles and Variable Acceleration in one dimension. | Variable Acceleration in one dimension and Differentiating Vectors. | Integrating Vectors & Module Test. |
| **YEAR 13** | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 | WEEK 6 | WEEK 7 | WEEK 8 |
| **Term 2** | | | | | | | | |
| | Revision | Revision | | | | | | |
| | | | | | | | | |
| **Term 2** | | | | | | | | |
| | Revision | Revision | | | | | | |