Years 5 and 6 CYCLE 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Driver	**Victorians**	**Theatre Studies**	**Rainforest Crunch**	**River Beneath our Feet** Local History and Geography	**Ancient Greeks Year 6 Project**	**Whole School**
Science	Forces	Electricity	Living things and their habitats	Properties and changes of materials	Animals including humans	
Ongoing Science	Seasonal change in relation to change of environment, adaption, temperate climates vs tropical climates, Earth and space.					
Geography	**Using globes maps and plans**		**Physical and Human Geography**	**Physical and Human Processes**		
Music **Year 5**	Cyclic patterns- develop children's ability to perform rhythmic patterns confidently and with a strong sense of pulse		Rounderbout- develop children's ability to sing and play music in 2 parts and transfer known songs to tuned instruments		Journey into Space- develop children's familiarity with keyboards and to introduce chords for children to compose a soundscape	
Music **Year 6**	Songwriter- develop children's ability to compose a song for younger children		Keyboards- develop children's ability to play known songs on keyboard with correct fingering and to develop children's ability to recognize the association of Western Classical Music with historic periods		Impovised compositions- develop children's ability to compose and improvise as part of a classical piece	
Enhancers DT	**Mechanism Control** • Using cams to change rotary movement into linear/reciprocating movement	**Inventors** Learn about Famous Inventors **Structures** • Knowing that the working characteristics of materials affects the way they are used • Using different combinations of materials to create functional products	**Food** • Adapt a recipe by adding or substituting an ingredient • Changing ingredients by using a heat source	**Materials – Structures** (optional) • Reinforcing and strengthening framework structures • Relating strength to shape	**Textiles (optional)** • Using a combination of pattern pieces and fabric shapes to make a 3-D product • Accuracy in pattern making	**Electrical Control** • Using a range of switches and circuits (including programming, monitoring and control) to design and make a functional product

Art	Painting Complementary colours	Drawing Perspective	Textiles Batik	Collage Mixed media	Sculpture Mod roc	Printing 3 tone
Maths	Place value, ordering, rounding. *Read and write numbers up to 10.000.000(including Roman numerals to 1000) and determine the value of each digit* Understanding + and - Mental calculation strategies (+ and -) and written formal methods. Understanding x Mental calculation strategies x_Pencil and paper procedures x. Formal methods. Money and 'real life' problems. Making decisions and checking results Understanding ÷. Mental calculation strategies (÷). Pencil	Reasoning about shapes Classify quadrilaterals using side/angle properties. Draw shapes with increasing accuracy. Visualise shapes from 2-D drawings. Percentages. Understand percentage as the number of parts in every 100. Find a percentage of an amount and of an unknown amount Statistics Construct and interpret frequency tables, bar charts with grouped discrete data, and line graphs; interpret and construct pie charts Ratio and proportion.(Year 6 skill) Find simple percentages of whole number quantities, Solve simple problems	Place value, ordering. Find the difference between a positive and a negative integer, or two negative integers, in the context such as temperature or a number line. Order a set of negative integers. Measures, converting weight and capacity, including problems. Record estimates/measurements from scales to suitable degree of accuracy. Use, read and write standard metric units of capacity and weight, abbreviations and relationships. Convert larger to smaller units of capacity and weight and vice versa.	Properties of numbers. Reasoning about numbers. Recognise and extend number sequences such as square, triangular numbers. Count on/back in steps of 0.1, 0.2, 0.25, 0.5. and then back._Identify common multiplies , common factors and common prime numbers _Recognise square and cubed numbers Statistics Choose appropriate operations/calculation methods. Explain working._Represent, extract and interpret data in a line graph (e.g. graph to convert miles to kilometres). Recognise that	Understanding x and ÷. Pencil and paper procedures (x and ÷)._Money and 'real life' problems._Making decisions and checking results Multiply HTU by TU .Division HTU by TU (long division, whole number answer). Use all four operations to solve word problems Fractions, decimals and percentages. Begin to convert fractions to decimal using division. Express simple fractions as percentages. Statistics	Shape and space. Reasoning about shapes. Recognise where shape will be after reflection in a line not parallel to a side or in two mirrors at 90°. Consolidate work on translations and rotations. Make and investigate a general statement about shapes. Measures, including problems. Use, read and write metric units of capacity, including abbreviations. Know and use the relationships between them. Convert larger to

	and paper procedures (÷). Money and 'real life' problems. Understand and use relationships between the 2 operations, and the principles of the arithmetic laws.Use related facts and doubling or halving e.g. halve an even number, Approximate first. Use informal pencil and paper methods to support, record or explain ÷. Extend written methods to ThHTU ÷ U (shirt division) and advancing towards ThHTU ÷T U using long division method. <u>Fractions, decimals and percentages.</u> <u>Measures, **converting length** including problems.</u>	involving ratio and proportion. <u>Properties of numbers.Reasoning about numbers.</u> Recognise and extend number sequences such as square, triangular numbers. Count on/back in steps of 0.1, 0.2, 0.25, 0.5. and then back.	Suggest suitable units/equipment to estimate or measure capacity and weight. Use all four operations to solve capacity and weight. word problems. Choose appropriate operations/calculation methods. Explain working. <u>Shape and space.</u> <u>Reasoning about shapes</u> Recognise, estimate acute and obtuse angles. Use protractor to measure and draw acute/obtuse angles to 1°. Check angle sum of triangle is 180°. Calculate angles in triangle or around a point. Recognise and explain patterns and relationships generalise and predict. <u>Geometry- position</u>	intermediate points have meaning. <u>Mental calculation strategies (+ and -).</u> <u>Money and 'real life' problems.</u> <u>Making decisions and checking results.</u>Use all four operations to solve word problems involving money or 'real life' measurement. Choose appropriate operations/calculation methods. Explain working. Check by adding in reverse order. <u>Fractions, decimals and percentages.</u> Order fractions by converting to common denominator, and position them on a number line. Use fractions as 'operators'; find fractions of numbers and quantities. Order a set of mixed	Extract information from a simple frequency table. and convert the data to percentages, using a calculator where appropriate. Interpret a simple pie chart, using fractions or percentages. Solve a problem by representing, extracting and interpreting data in frequency tables and bar charts with grouped discrete data	smaller units of capacity, and vice versa. Know approximate metric equivalents for pint and gallon. Suggest suitable units and equipment to estimate or measure capacity. <u>Mental calculation strategies (+ and -).</u> <u>Money and 'real life' problems.</u> <u>Making decisions and checking results</u> Use number facts and place value to add and subtract mentally. Extend written methods to column addition and subtraction of numbers involving decimals.

			<u>and direction</u> Read and plot co-ordinates in all four quadrants. Draw and translate simple shapes on the coordinate plane and reflect them in the axes. <u>Area and Perimeter</u> Use formula for area of rectangle. Calculate the area of a shape formed from rectangles, including using a calculator with memory. Find perimeter of shapes and solve problems if given area, what is the perimeter?	numbers or measurements with up to 3 decimal places. Round a number to the nearest tenth or nearest whole number.		Use all four operations to solve word problems involving money or 'real life', including percentages. Choose appropriate operations/calculation methods. Explain working. Check using sums/differences of odd/even numbers or doing the inverse calculation, including using a calculator. Factorise numbers to 100 into prime factors. Investigate number sequences. Develop a generalised relationship in words; express it in a formula using

												symbols. Solve number puzzles and explain methods and reasoning. Consolidate all learning.
PSE	Health and Wellbeing Relationships Living in the Wider World		Health and Wellbeing Relationships Living in the Wider World		Health and Wellbeing Relationships Living in the Wider World		Health and Wellbeing Relationships Living in the Wider World		Health and Wellbeing Relationships Living in the Wider World		Health and Wellbeing Relationships Living in the Wider World
RE	Ritual Y5 Jesus Y6		Gurdwara Y5 Christmas Y6		Easter Y5 Samsara Y6		Five Pillars of Islam Y5 Pesach Y6		God Talk Y5 Nirvana Y6		Quran Y5 Torah Y6
Computer Science	E safety **AUP(**lgfl ks2 pupil agreement yr5+6): ICT suite **rules(** design a poster 3 lessons yr 5 and 6); online etiquette, **emails** (tell me a joke yr 5-2 lessons- *before*	Coding Purple Mash 2code: Gorilla - .(Y6 all units if poss / Y5 3 beginning units- ask about yr 4)	**Algorithims 3bm planning** USERNAME: essendinegues t PASSWORD: guest Logo(turtlema nia-yr4) Logo block of flats-yr 5)	E safety Social networking , passwords, cyberbullyi ng (Resources : Cybercafé / LGFL usonline 'our online world' 3bm resources	Coding 2code Coding principl es - All Free code - all	E safety Mobiles, cyberbullyi ng, chatting (Resources : Cybercafé / LGFL usonline 'our online world' 3bm resources	Simulatio ns gaming Habitats to link with science and persuasiv e writing	E safety Mobiles, File sharing, (Resourc es: Cybercaf é / LGFL usonline 'our online world' 3bm resource s	Programmi ng and Coding 3bm planning	Contr ol and devic es	E safety Hacking and viruses, instant messagiing (Resources: Cybercafé / LGFL usonline 'our online world' 3bm resources

	lessons create spreadsheet)/ (Resources: Cybercafé / LGFL usonline 'our online world' 3bm resources										

Years 5 and 6 CYCLE 2	Autumn	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Driver	**Romans**	**Pop!**	**Mayan Mysteries**	**River Beneath our Feet** Local History and Geography	**Back to the Future** **Year 6 Project**	**Whole School**
Science	Forces	Light	Earth and space	Living things and their habitats	Evolution and inheritance	Animals including humans
Ongoing Science	Seasonal change in relation to change of environment, adaption, temperate climates vs tropical climates, Earth and space.					
Geography	Using globes maps and plans		Physical and Human Geography	Physical and Human Processes	Biomes	
Music **Year 5**	Cyclic patterns- develop children's ability to perform rhythmic patterns confidently and with a strong sense of pulse		Rounderbout- develop children's ability to sing and play music in 2 parts and transfer known songs to tuned instruments		Journey into Space- develop children's familiarity with keyboards and to introduce chords for children to compose a soundscape	
Music **Year 6**	Songwriter- develop children's ability to compose a song for younger children		Keyboards- develop children's ability to play known songs on keyboard with correct fingering and to develop children's ability to recognize the association of Western Classical Music with historic periods		Impovised compositions- develop children's ability to compose and improvise as part of a classical piece	
Enhancers DT	**Mechanical Control** (optional) • Using cams to change rotary movement into linear/reciprocating movement	**Structures** (optional) • Knowing that the working characteristics of materials affects the way they are used • Using different combinations of materials to create functional products	**Textiles** • Using a combination of pattern pieces and fabric shapes to make a 3-D product • Accuracy in pattern making	**Frame structures** • Reinforcing and strengthening framework structures • Relating strength to shape	**Inventors you should know about** **Materials** • Knowing that the working characteristics of materials affects the way they are used • Using different combinations of materials to create	**Mechanical and Electrical Control** • Using a range of switches and circuits (including programming, monitoring and control) to design and make a functional product

					functional products Learn about Famous Inventors	
Maths	Place value, ordering, rounding. *Read and write numbers up to 10.000.000(including Roman numerals to 1000) and determine the value of each digit* Understanding + and - Mental calculation strategies (+ and -) and written formal methods. Understanding x Mental calculation strategies x. Pencil and paper procedures x. Formal methods. Money and 'real life' problems. Making decisions and checking results Understanding ÷.	Reasoning about shapes Classify quadrilaterals using side/angle properties. Draw shapes with increasing accuracy. Visualise shapes from 2-D drawings. Percentages. Understand percentage as the number of parts in every 100. Find a percentage of an amount and of an unknown amount Statistics Construct and interpret frequency tables, bar charts with grouped discrete data, and line graphs; interpret	Place value, ordering. Find the difference between a positive and a negative integer, or two negative integers, in the context such as temperature or a number line. Order a set of negative integers. Measures, converting weight and capacity, including problems. Record estimates/measurements from scales to suitable degree of accuracy. Use, read and write standard metric units of capacity and weight, abbreviations and relationships. Convert larger to smaller units of capacity and weight and vice versa. Suggest suitable units/equipment to estimate or measure capacity and weight. Use all four operations to	Properties of numbers. Reasoning about numbers. Recognise and extend number sequences such as square, triangular numbers. Count on/back in steps of 0.1, 0.2, 0.25, 0.5. and then back. Identify common multiplies , common factors and common prime numbers Recognise square and cubed numbers Statistics Choose appropriate operations/calculation methods. Explain working. Represent, extract and interpret data in a line graph (e.g. graph to convert miles to kilometres). Recognise that intermediate points	Understanding x and ÷. Pencil and paper procedures (x and ÷). Money and 'real life' problems. Making decisions and checking results Multiply HTU by TU .Division HTU by TU (long division, whole number answer). Use all four operations to solve word problems Fractions, decimals and percentages. Begin to convert fractions to decimal using division. Express simple fractions as percentages. Statistics	Shape and space. Reasoning about shapes Recognise where shape will be after reflection in a line not parallel to a side or in two mirrors at 90°. Consolidate work on translations and rotations. Make and investigate a general statement about shapes. Measures, including problems. Use, read and write metric units of capacity, including abbreviations. Know and use the relationships between them. Convert larger to smaller units of capacity, and vice versa. Know approximate metric equivalents for pint and gallon.

	Mental calculation strategies (÷). Pencil and paper procedures (÷). Money and 'real life' problems. Understand and use relationships between the 2 operations, and the principles of the arithmetic laws.Use related facts and doubling or halving e.g. halve an even number, Approximate first. Use informal pencil and paper methods to support, record or explain ÷. Extend written methods to ThHTU ÷ U (shirt division) and advancing towards ThHTU ÷T U using long division method. <u>Fractions, decimals and percentages.</u>	and construct pie charts <u>Ratio and proportion.(Year 6 skill)</u> Find simple percentages of whole number quantities, Solve simple problems involving ratio and proportion. <u>Properties of numbers.Reasoning about numbers.</u> Recognise and extend number sequences such as square, triangular numbers. Count on/back in steps of 0.1, 0.2, 0.25, 0.5. and then back.	solve capacity and weight. word problems. Choose appropriate operations/calculation methods. Explain working. <u>Shape and space.</u> <u>Reasoning about shapes</u> Recognise, estimate acute and obtuse angles. Use protractor to measure and draw acute/obtuse angles to 1°. Check angle sum of triangle is 180°. Calculate angles in triangle or around a point. Recognise and explain patterns and relationships generalise and predict. <u>Geometry- position and direction</u> Read and plot co-ordinates in all four quadrants. Draw and translate simple shapes on the coordinate plane and reflect them in the	have meaning. <u>Mental calculation strategies (+ and -).</u> <u>Money and 'real life' problems.</u> <u>Making decisions and checking results.</u>Use all four operations to solve word problems involving money or 'real life' measurement. Choose appropriate operations/calculation methods. Explain working. Check by adding in reverse order. <u>Fractions, decimals and percentages.</u> Order fractions by converting to common denominator, and position them on a number line. Use fractions as 'operators'; find fractions of numbers and quantities. Order a set of mixed numbers or	Extract information from a simple frequency table. and convert the data to percentages, using a calculator where appropriate. Interpret a simple pie chart, using fractions or percentages. Solve a problem by representing, extracting and interpreting data in frequency tables and bar charts with grouped discrete data	Suggest suitable units and equipment to estimate or measure capacity. <u>Mental calculation strategies (+ and -).</u> <u>Money and 'real life' problems.</u> <u>Making decisions and checking results</u> Use number facts and place value to add and subtract mentally. Extend written methods to column addition and subtraction of numbers involving decimals. Use all four operations to solve word problems involving money or 'real life', including percentages. Choose appropriate operations/calculation methods. Explain working. Check using sums/differences of

	Measures, **converting length** including problems.		axes. Area and Perimeter Use formula for area of rectangle. Calculate the area of a shape formed from rectangles, including using a calculator with memory. Find perimeter of shapes and solve problems if given area, what is the perimeter?	measurements with up to 3 decimal places. Round a number to the nearest tenth or nearest whole number.		odd/even numbers or doing the inverse calculation, including using a calculator. Factorise numbers to 100 into prime factors. Investigate number sequences. Develop a generalised relationship in words; express it in a formula using symbols. Solve number puzzles and explain methods and reasoning. Consolidate all learning.
Art	Painting Landscapes	Drawing Pen & ink	Sculpture clay	Collage	Textiles	Year 6 Production Digital
PSE	Health and Wellbeing Relationships Living in the Wider World	Health and Wellbeing Relationships Living in the Wider World	Health and Wellbeing Relationships Living in the Wider World	Health and Wellbeing Relationships Living in the Wider World	Health and Wellbeing Relationships Living in the Wider World	Health and Wellbeing Relationships Living in the Wider World
RE	Ritual Y5 Jesus Y6	Gurdwara Y5 Christmas Y6	Easter Y5 Samsara Y6	Five Pillars of Islam Y5 Pesach Y6	God Talk Y5 Nirvana Y6	Quran Y5 Torah Y6