Swarland Primary School Curriculum

The following document aims to give an overview of the curriculum delivered at our school for our KS2 pupils. It has been designed to provide rigour, challenge, engagement, continuity and progression with breadth and depth of subject knowledge.

It has been constructed using our curriculum principles which can also be downloaded from our website.

The curriculum is a working document and subject to change as it is adapted to cater for individual needs and children's interests.

Swarland Primary School Long Term Plan For PSHE Cycle						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**

L K S 2 C Y C L E A	**RELATIONSHIPS 1-9 FAMILIES & CLOSE POSITIVE RELATIONSHIPS** To recognise what constitutes a positive, healthy relationship, that there are different types of relationships and develop the skills to form and maintain positive healthy relationships. Marriage, civil partnerships. To learn that marriage is a commitment freely entered into by both people, that no one should marry if they do not want to or are not making this decision for themselves; committed loving relationships, civil partnership. Characteristics of healthy family life - different types of family structures. **LIVING IN WIDER WORLD – SHARED RESPONSIBILITIES** L1 -5 Recognise rules of law - British Values- consequences. **H1-14 HEALTHY LIFESTYLES** Bikeability level 1 – Safety in the environment H1. how to make informed decisions about health - dental, sleep, screen time	**LIVING IN WIDER WORLD - COMMUNITIES** L1-5 To recognise reasons for rules and laws, compare to school rules and consequences. Human rights- protection. Protected characteristics. L6-10 To know what being part of a community means and about varied institutions that support communities locally and nationally. To appreciate the range of national, regional, religious and ethnic identities in the United Kingdom. British values of individual liberty, mutual respect. **LIVING IN WIDER WORLD – ECONOMIC WELL BEING & MONEY L17-24** L17. about the different ways to pay for things and the choices people have about this L18. to recognise that people have different attitudes towards saving and spending money; what influences people's decisions; what makes something 'good value for money L21. different ways to keep track of money To develop an initial understanding of 'interest', 'loan', 'debt' and 'tax' and their contribution to society.	**HEALTHY LIVING- MENTAL HEALTH H15-24** H15. that mental health, just like physical health, is part of daily life; the importance of taking care of mental health H16. about strategies and behaviours that support mental health — including how good quality sleep, physical exercise/time outdoors, being involved in community groups, doing things for others, clubs, and activities, hobbies and spending time with family and friends can support mental health and wellbeing H17. to recognise that feelings can change over time and range in intensity H18. about everyday things that affect feelings and the importance of expressing feelings **HEALTHY LIVING - OURSELVES GROWING & CHANGING H25-36** H25. about personal identity; what contributes to who we are (e.g. ethnicity, family, gender, faith, culture, hobbies, likes/dislikes)

	H2. about the elements of a balanced, healthy lifestyle H3. about choices that support a healthy lifestyle, and recognise what might influence these H4. how to recognise that habits can have both positive and negative effects on a healthy lifestyle H5. about what good physical health means; how to recognise early signs of physical illness H6. about what constitutes a healthy diet; how to plan healthy meals; benefits to health and wellbeing of eating nutritionally rich foods; risks associated with not eating a healthy diet including obesity and tooth decay. H7. how regular (daily/weekly) exercise benefits mental and physical health (e.g. walking or cycling to school, daily active mile); recognise opportunities to be physically active and some of the risks associated with an inactive lifestyle H8. about how sleep contributes to a healthy lifestyle; routines that support good quality sleep; the effects of lack of sleep on the body, feelings, behaviour and ability to learn Ongoing threads through all terms of zones of regulation, understanding emotions, British values.	24. to identify the ways that money can impact on people's feelings and emotions	H26. that for some people gender identity does not correspond with their biological sex H27. to recognise their individuality and personal qualities H28. to identify personal strengths, skills, achievements and interests and how these contribute to a sense of self-worth H29. about how to manage setbacks/perceived failures, including how to re-frame unhelpful thinking

LKS2 CYCLE B	**RELATIONSHIPS- FRIENDSHIPS, HURTFUL BEHAVIOUR & BULLYING R10-21**	**RELATIONSHIPS - SAFE RELATIONSHIPS, RESPECTING SELF & OTHERS R22-34**	**HEALTHY LIVING- ASPIRATIONS WORK CAREERS L25-32**
	R10. about the importance of friendships; strategies for building positive friendships; how positive friendships support wellbeing	R22. about privacy and personal boundaries; what is appropriate in friendships and wider relationships (including online);	L25. to recognise positive things about themselves and their achievements; set goals to help achieve personal outcomes
	R11. what constitutes a positive healthy friendship (e.g. mutual respect, trust, truthfulness, loyalty, kindness, generosity, sharing interests and experiences, support with problems and difficulties); that the same principles apply to online friendships as to face-to-face relationships	R23. about why someone may behave differently online, including pretending to be someone they are not; strategies for recognising risks, harmful content and contact; how to report concerns	L26. that there is a broad range of different jobs/careers that people can have; that people often have more than one career/type of job during their life
	R12. to recognise what it means to 'know someone online' and how this differs from knowing someone face-to-face; risks of communicating online with others not known face-to-face	R24. how to respond safely and appropriately to adults they may encounter (in all contexts including online) whom they do not know	L27. about stereotypes in the workplace and that a person's career aspirations should not be limited by them
	R13. the importance of seeking support if feeling lonely or excluded	R25. recognise different types of physical contact; what is acceptable and unacceptable; strategies to respond to unwanted physical contact	L28. about what might influence people's decisions about a job or career (e.g. personal interests and values, family connections to certain trades or businesses, strengths and qualities, ways in which stereotypical assumptions can deter people from aspiring to certain jobs)
	R14. that healthy friendships make people feel included; recognise when others may feel lonely or excluded; strategies for how to include them	R26. about seeking and giving permission (consent) in different situation	

	R19. about the impact of bullying, including offline and online, and the consequences of hurtful behaviour R20. strategies to respond to hurtful behaviour experienced or witnessed, Ongoing threads through all terms of zones of regulation, understanding emotions, British values.	R30. that personal behaviour can affect other people; to recognise and model respectful behaviour online - ONLINE SAFETY **LIVING IN WIDER WORLD MEDIA LITERACY & DIGITAL RESILIENCE L11-16** L11. recognise ways in which the internet and social media can be used both positively and negatively L12. how to assess the reliability of sources of information online; and how to make safe, reliable choices from search results L13. about some of the different ways information and data is shared and used online, including for commercial purposes	

U K S 2 C Y C L E A	**RELATIONSHIPS 1-9 FAMILIES & CLOSE POSITIVE RELATIONSHIPS** To recognise different types of relationships inc those between friends, relatives, family and acquaintances.; romantic, sexual and online relationships. To know that civil partnerships and marriage are examples of public demonstration of the commitment made between two people who love and care for each other and want to spend their lives together and who are of the legal age to make that commitment. Crime- forced marriage - British values Rule of Law. How to recognise if family relationships are making them feel unhappy or unsafe.To recognise ways in which a relationship can be unhealthy and whom to talk to if they need support. LIVING IN WIDER WORLD- SHARED RESPONSIBILITIES L1 -5 Recognise rules of law - British Values- consequences. Human rights and responsibilities. Equality. Protected characteristics. **HEALTHY LIFESTYLES H1-14** Bikeability level 2. H7. how regular (daily/weekly) exercise benefits mental and physical health (e.g. walking or cycling to school, daily active mile); recognise opportunities to be physically active and some of the risks associated with an inactive lifestyle H8. about how sleep contributes to a healthy lifestyle; routines that support good quality sleep; the effects of lack of sleep on the body, feelings, behaviour and ability to learn H46-50H46. about the risks and effects of legal drugs common to everyday life (e.g. cigarettes, e-cigarettes/vaping,	**LIVING IN WIDER WORLD - COMMUNITIES** L1-5 To recognise reasons for rules and laws, compare to school rules and consequences. Relationship between rights and responsibilities Human rights- protection. Protected characteristics. L5. ways of carrying out shared responsibilities for protecting the environment in school and at home; how everyday choices can affect the environment (e.g. reducing, reusing, recycling; food choices) L6-10 Community groups, contributions from different community groups- diversity - benefits and values. L9. about stereotypes; how they can negatively influence behaviours and attitudes towards others; strategies for challenging stereotypes L10. about prejudice; how to recognise behaviours/actions which discriminate against others; ways of responding to it if witnessed or experience **LIVING IN WIDER WORLD – ECONOMIC WELL BEING & MONEY L17-24** To develop an initial understanding of 'interest', 'loan', 'debt' and 'tax' and their contribution to society. L19. that people's spending decisions can affect others and the environment (e.g. Fair trade, buying single-use plastics, or giving to charity) L20. to recognise that people make spending decisions based on priorities, needs and wants L22. about risks associated with money (e.g. money can be won, lost or stolen) and ways of keeping money safe	**HEALTHY LIVING - MENTAL HEALTH H15-24** H20. strategies to respond to feelings, including intense or conflicting feelings; how to manage and respond to feelings appropriately and proportionately in different situations H21. to recognise warning signs about mental health and wellbeing and how to seek support for themselves and others H22. to recognise that anyone can experience mental ill health; that most difficulties can be resolved with help and support; and that it is important to discuss feelings with a trusted adult H23. about change and loss, including death, and how these can affect feelings; ways of expressing and managing grief and bereavement H24. problem-solving strategies for dealing with emotions, challenges and change, including the transition to new schools **HEALTHY LIVING - OURSELVES GROWING & CHANGING H25-36** H30. to identify the external genitalia and internal reproductive organs in males and females and how the process of puberty relates to human reproduction

	alcohol and medicines) and their impact on health; recognise that drug use can become a habit which can be difficult to break H47. to recognise that there are laws surrounding the use of legal drugs and that some drugs are illegal to own, use and give to others H48. about why people choose to use or not use drugs (including nicotine, alcohol and medicines); H49. about the mixed messages in the media about drugs, including alcohol and smoking/vaping H50. about the organisations that can support people concerning alcohol, tobacco and nicotine or other drug use; people they can talk to if they have concerns H9. that bacteria and viruses can affect health; how everyday hygiene routines can limit the spread of infection; the wider importance of personal hygiene and how to maintain it H10. how medicines, when used responsibly, contribute to health; that some diseases can be prevented by vaccinations and immunisations; how allergies can be managed Further develop strategies for keeping physically and emotionally safe including road safety. Ongoing threads through all terms of zones of regulation, understanding emotions, British values.	L23. about the risks involved in gambling; different ways money can be won or lost through gambling-related activities and their impact on health, wellbeing and future aspirations To know about the role money plays in their own lives and in others, including how to manage their money and about being a critical consumer. What is meant by enterprise and begin to develop enterprise skills.	H31. about the physical and emotional changes that happen when approaching and during puberty (including menstruation, key facts about the menstrual cycle and menstrual wellbeing, erections and wet dreams) H32. about how hygiene routines change during the time of puberty, the importance of keeping clean and how to maintain personal hygiene

U K S 2 C Y C L E B	**RELATIONSHIPS- FRIENDSHIPS, HURTFUL BEHAVIOUR & BULLYING R10-21** R15. strategies for recognising and managing peer influence and a desire for peer approval in friendships; to recognise the effect of online actions on others R16. how friendships can change over time, about making new friends and the benefits of having different types of friends R17. that friendships have ups and downs; strategies to resolve disputes and reconcile differences positively and safely R18. to recognise if a friendship (online or offline) is making them feel unsafe or uncomfortable; how to manage this and ask for support if necessary R19. about the impact of bullying, including offline and online, and the consequences of hurtful behaviour R20. strategies to respond to hurtful behaviour experienced or witnessed, offline and online (including teasing, name-calling, bullying, trolling, harassment or the deliberate excluding of others); how to report concerns and get support	**RELATIONSHIPS - SAFE RELATIONSHIPS, RESPECTING SELF & OTHERS R22-34** R13,16,17,14,18,15 To realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours. R14,18 How to recognise bullying and abuse in all its forms including prejudice-based bullying both in person, online and through social media. R32. about respecting the differences and similarities between people and recognising what they have in common with others e.g. physically, in personality or background R33. to listen and respond respectfully to a wide range of people, including those whose traditions, beliefs and lifestyle are different to their own R34. how to discuss and debate topical issues, respect other people's point of view and constructively challenge those they disagree with **LIVING IN WIDER WORLD MEDIA LITERACY & DIGITAL RESILIENCE L11-16** L14. about how information on the internet is ranked, selected and targeted at specific individuals and groups; that connected devices can share information L15. recognise things appropriate to share and things that should not be shared on social media; rules surrounding distribution of images L16. about how text and images in the media and on social media can be manipulated or invented; strategies to evaluate the reliability of sources and identify misinformation	**HEALTHY LIVING - OURSELVES GROWING & CHANGING H25-36** H17 Which, why and how, commonly available substances and drugs can damage their immediate and future health and safety, that some are restricted and some are illegal to own, use and give to others. H18 Know how their body will, and their emotions may, change as they approach and move through puberty. H19 Know about human reproduction. H22, 25, 23, 24 Know how to manage requests for images of themselves or others, what is and is not appropriate to ask for or share; who to talk to if they feel uncomfortable or are concerned by such a request. **HEALTHY LIVING- ASPIRATIONS WORK CAREERS L25-32** L29. that some jobs are paid more than others and money is one factor which may influence a person's job or career choice; that people may choose to do voluntary work which is unpaid L30. about some of the skills that will help them in their future careers e.g. teamwork, communication and negotiation L31. to identify the kind of job that they might like to do when they are older L32. to recognise a variety of routes into careers (e.g. college, apprenticeship, university

	R21. about discrimination: what it means and how to challenge it Ongoing threads through all terms of zones of regulation, understanding emotions, British values.		

Swarland Primary School Long Term Plan For Religious Education Cycle						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 3 and 4 Cycle A	L2.1 What do Christians learn from the Creation story? (UC: Creation/Fall)	L2.3: What is the 'Trinity' and why is it important for Christians? (UC: Incarnation/God)	L2.9 How do festivals and worship show what matters to Muslim people?	L2.10 How do festivals and family life show what matters to Jewish people?	L2.4: What kind of world did Jesus want? (Christians: UC: Gospel)	L2.11: How and why do people mark the significant events of life?

Year 3 and 4 Cycle B	L2.2: What is it like for someone to follow God? (Christians) (UC: People of God)	L2.7: What do Hindus believe God is like?	L2.8: What does it mean to be a Hindu in Britain today?	L2.5: Why do Christians call the day Jesus died 'Good Friday'? (UC: Salvation)	L2.6: For Christians, when Jesus left, what was the impact of Pentecost? (UC: Kingdom of God)	L2.12: How and why do people try to make the world a better place?
Year 5 and 6 Cycle A	U2.2: Creation and Science: Conflicting or Complementary? (Christians) (UC: Creation/Fall)	U2.3: Why do Christians believe Jesus was the Messiah? (UC: Incarnation)	U2.8: What does it mean to be a Muslim in Britain today?	U2.9: Why is the Torah so important to Jewish people?	U2.4: Christians and how to live: 'What would Jesus do?' (UC: Gospel)	U2.12: Who does faith help people when life gets hard?
Year 5 and 6 Cycle B	U2.1: What does it mean if Christians believe God is Holy? (UC: God)	U2.11: Why do some people believe in God and some not?	U2.7: Why do Hindus want to be good?	U2.5: What do Christians believe Jesus did to 'save' people?(UC: Salvation)	U2.6: For Christians, what kind of king is Jesus? (UC: Kingdom of God)	U2.10: What matters most to Humanists and Christians?

Christianity (Understanding Christianity)	Multi-faith Comparative Units	Muslim Units	Jewish Units	Hindu units	Non-Religious Worldviews Units

LKS2 Long term maths planning

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12

Aut	Place value Step 1 Hundreds, tens and ones Step 2 Represent numbers to 1,000 Step 3 Partition numbers to 1,000 Step 4 Thousands Step 5 Represent numbers to 10,000 Step 6 Partition numbers to 10,000 Step 7 Flexible partitioning Step 8 Find 1, 10, 100 or 1,000 more or less Step 9 Number line to 1,000 Step 10 Number line to 10,000 Step 11 Estimate on a number line Step 12 Compare numbers Step 13 Order numbers Step 14 Round to the nearest 10 Step 15 Round to the nearest 100 Step 16 Round to the nearest 1,000 Step 17 Round to the nearest 10, 100 or 1,000 Step 18 Roman numerals	Addition and subtraction Step 1 Add and subtract 1s, 10s, 100s, 1,000s Step 2 Add 1s, 10s, 100s across a boundary Step 3 Subtract 1s, 10s, 100s across a boundary Step 4 Make connections Step 5 Add up to two 4-digit numbers – no exchange Step 6 Add up to two 4-digit numbers – across a 10 Step 7 Add up to two 4-digit numbers – across a 100 Step 8 Add up to two 4-digit numbers – across a 1,000 Step 9 Add numbers with a different number of digits Step 10 Subtract up to two 4-digit numbers – no exchange Step 11 Subtract up to two 4-digit numbers – across a 10 Step 12 Subtract up to two 4-digit numbers – across a 100 Step 13 Subtract up to two 4-digit numbers – across a 1,000 Step 14 Subtract numbers with a different number of digits Step 15 Complements to 100 and 1,000 Step 16 Estimate answers Step 17 Inverse operations Step 18 Efficient methods	Multiplication and Division A Step 1 Use arrays Step 2 Sharing and grouping Step 3 The 2, 5 and 10 times-tables Step 4 The 4 times-table Step 5 The 8 times-table Step 6 The 2, 4 and 8 times-tables Step 7 The 3 times-table Step 8 The 6 times-table The 9 times-table Step 10 The 3, 6 and 9 times-tables Step 11 The 7 times-table Step 12 The 11 times-table Step 13 The 12 times-table Step 14 Multiply by 1 and 0 Step 15 Divide a number by 1 and itself	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12

Spr From Spring onwards. Following the release of new WR guidance, these objectives may change	Multiplication and Division B Year 3 Multiplication – equal groups Use arrays Multiples of 2 Multiples of 5 and 10 haring and grouping Multiply by 3 Divide by 3 The 3 times-table Multiply by 4 Divide by 4 The 4 times-table Multiply by 8 Divide by 8 The 8 times-table The 2, 4 and 8 times-tables Year 4 Multiples of 3 Multiply and divide by 6 6 times-table and division facts	Length and Perimeter Length and Perimeter Year 3 Measure in metres and centimetres Measure in milllimetres Measure in centimetres and millimetres Work out equivalent lengths (metres and centimetres and centimetres and millimetres) Compare lengths, Add and Subtract lengths Know what perimeter is and how to measure and calculate it Year 4 Measure in kilometres and metres Work out equivalent lengths (kilometres and metres) Calculate Perimeter on a grid Calculate Perimeter of a rectangle Calculate Perimeter of rectilinear shapes Find missing lengths in rectilinear shapes	Fractions A Year 3 Understand the denominators of unit fractions Compare and order unit fractions Understand the numerators of non-unit fractions Understand the whole Compare and order non-unit fractions Fractions and scales Fractions on a number line Equivalent fractions on a number line Equivalent fractions as bar models Year 4 Understand the whole Count beyond 1 Partition a mixed number Number lines with mixed numbers Compare and order mixed numbers Understand improper fractions Convert mixed numbers to improper fractions Convert improper fractions to mixed numbers Equivalent fractions on a number line Equivalent fraction families Add two or more fractions Add fractions and mixed numbers Subtract two fractions Subtract from whole amounts Subtract from mixed numbers	Mass and capacity Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) Convert between different units of measure.	Fractions B Year 3 Understand the denominators of unit fractions Compare and order unit fractions Understand the numerators of non-unit fractions Understand the whole Compare and order non-unit fractions Fractions and scales Fractions on a number line Equivalent fractions on a number line Equivalent fractions as bar models Year 4 Understand the whole Count beyond 1 Partition a mixed number Number lines with mixed numbers Compare and order mixed numbers Understand improper fractions Convert mixed numbers to improper fractions

		Work out the Perimeter of regular and irregular polygons Understand what area is by counting squares Compare areas			Convert improper fractions to mixed numbers Equivalent fractions on a number line Equivalent fraction families Add two or more fractions Add fractions and mixed numbers Subtract two fractions Subtract from whole amounts Subtract from mixed numbers

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12

Sum	Time Year 3 Step 1 Roman numerals to 12 Step 2 Tell the time to 5 minutes Step 3 Tell the time to the minute Step 4 Read time on a digital clock Step 5 Use am and pm Step 6 Years, months and days Step 7 Days and hours Step 8 Hours and minutes – use start and end times Step 9 Hours and minutes - use durations Step 10 Minutes and seconds Step 11 Units of time Step 12 Solve problems with time Year 4 Step 1 Years, months, weeks and days Step 2 Hours, minutes and seconds Step 3 Convert between analogue and digital times Step 4 Convert to the 24-hour clock Step 5 Convert from the 24-hour clock	Decimals Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents Round decimals with one decimal place to the nearest whole number Compare numbers with the same number of decimal places up to two decimal places. Solve simple measure and money problems involving fractions and decimals to two decimal places.	Money Add and subtract amounts of money to give change, using both the £ and p in practical contexts. Estimate, compare and calculate different measures, including money in pounds and pence	Shape Year 3 Turns and angles Right Angles Compare Angles Measure and draw accurately Horizontal and Vertical lines Parallel and Perpendicular lines Recognise and describe 2D and 3D shapes Draw polygons and Make 3D shapes Year 4 Understand angles as turns Identify angles Compare and order angles Triangles Quadrilaterals Polygons Lines of Symmetry Complete a symmetric figure	Position and direction . Year 3 Interpret and present data using bar charts, pictograms and tables Solve one and two step questions using information presented in scaled bar charts and pictograms and tables. Year 4 Describe positions on a 2D grid as co-ordinates in the first quadrant Descibe movements between positions as translations of a given	Statistics Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other charts

					unit to the left/right and up/down Plot specified points and draw sides to complete given polygon	

UKS2 MATHEMATICS

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Aut	Place value <u>Year 4</u> Count in 25s Count in 1,000s 1,000s, 100s, 10s and 1s Number line to 1 0,000 1,000 more or less Compare numbers Order numbers Round to the nearest 10 Round to the nearest 100 Round to the nearest 1,000 Roman numerals to 100 Negative numbers Negative numbers <u>Year 5</u> Number to 10,000 Number to 100,000 Numbers to a million			Addition and Subtraction <u>Year 4</u> Add and subtract 1s, 10s, 100s and 1000s Add two 4-digit numbers – no exchange Add two 4-digit numbers – one exchange Add two 4-digit numbers – more than one exchange Subtract two 4-digit numbers – no exchange Subtract two 4-digit numbers – one exchange Subtract two 4-digit numbers – more than one exchange Efficient subtraction Checking strategies Estimate answers		Multiplication <u>Year 4</u> Multiply by 1 and 0 Multiply by 10 Multiply by 100 Multiply and divide by 6 6 times-table and division facts Written methods Multiply 2-digits by 1-digit Multiply 3-digits by 1-digit 11 and 12 times-table Multiply 3 numbers <u>Year 5</u> Multiples Multiples of 10, 100, 1000 Prime Numbers Squares and cubes		Division <u>Year 4</u> Factors Factor pairs Divide by 10 Divide by 100 Divide 2-digits by 1-digit Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 3-digits by 1-digit Multiply and divide by 9 9 times-table and division facts <u>Year 5</u> Factors Common Factors Divide by 10, 100, 1000 Short Division Divide 4 by 1 Divide 4 by 1 Division using factors		Fractions and Time <u>Year 4</u> What is a fraction Equivalent Fractions Equivalent Fractions Equivalent Fractions Count in Fractions Fractions greater than 1 Fractions greater than 1 Add within 1 Add Fractions Add 3 Fractions Add Fractions Add Fractions Subtract Fractions Subtract Fractions Subtract Fractions Fractions of a Quantity Fractions of a Quantity Fractions of a Quantity		

	Numbers to a million Compare and order numbers to 100,000 Compare and order numbers to a million Compare and order any numbers Round to the nearest 10, 100 and 1,000 Round numbers within 100,000 Round numbers to a million Roman numerals to 1,000 Negative numbers Negative numbers <u>Year 6</u> Number to 10,000 Number to 100,000 Numbers to a million Numbers to ten million Compare and order numbers to 100,000 Compare and order any number Compare and order any numbers	<u>Year 5</u> Add whole numbers with more than 4-digits (column method) Add whole numbers with more than 4-digits (column method) Add whole numbers Identify missing number problems Subtract whole numbers with more than 4-digits (column method) Subtract whole numbers Identify missing number problems Multi-step addition and subtraction problems Inverse operations (addition and subtraction) Round to estimate and approximate <u>Year 6</u>	Multiply by 10, 100, 1000 Multiply 4x1 Multiply 2x2 Multiply 2x2 Area Model Multiply 3x2 Multiply 4x2 <u>Year 6</u> Common multiples Common multiples Prime Numbers Squares and cubes Multiply by 10, 100, 1000 Multiply 4 digit numbers Multiply using 2 digit numbers Multiply 3x2 numbers Multiply 4x2 numbers Multiply 4x2 numbers	Divide with remainders Divide with remainders Solve problems with division <u>Year 6</u> Common Factors Common Factors Divide by 10, 100, 1000 Short Division Division using factors Long division 1 Long division 2 Long division 3 Long division 4 Reason from known facts	Calculate Quantities Calculate Quantities Years & Months Weeks & Days Hours, minutes and seconds Analogue to Digital – 12hr Analogue to Digital – 24hr <u>Year 5</u> Equivalent Fractions Simplify Fractions Mixed Number to Improper Improper to mixed number Number Sequences Compare & Order Less than 1 Compare & Order Greater than 1 Add Within 1 Add 3 Fractions Add Fractions Add Mixed Number Fractions Add Fractions Subtract Fractions

	Round to the nearest 10, 100 and 1,000 Round any numbers Round any numbers Roman numerals to 1,000 Negative numbers Negative numbers	Add whole numbers with more than 4-digits (column method) Add whole numbers with more than 4-digits (column method) Add whole numbers Identify missing number problems Subtract whole numbers with more than 4-digits (column method) Subtract whole numbers Identify missing number problems Multi-step addition and subtraction problems Order of operations Mental calculations and estimation			Subtract Breaking Whole Subtract Mixed Number Subtract 2 Mixed Number Subtract 2 Mixed Number Multiply Unit Fractions by Integers Multiply Non-Unit Fractions by Integers Multiply Mixed Number by Integer Multiply Mixed Number by Integer Using Fractions as Operators Multiply Non-Unit Fractions Fractions of Amounts Fractions of Amounts <u>Year 6</u> Equivalent Fractions Simplify Fractions Mixed Number to Improper Improper to mixed number Fractions on a Number line Compare & Order (Denominator) Compare & Order (Numerator)

					Add Fractions using LCM (Related) Add Fractions using LCM (Unrelated) Add Mixed Number (adding whole) Add Mixed Number (Improper) Add Fractions Subtract Fractions using Multiples (related) Subtract Fractions using Multiples (unrelated) Subtract Fractions (subtract whole) Subtract Fractions (Improper) Subtract 2 Mixed Number Multiply Unit Fractions by Integers Multiply Non-Unit Fractions Multiply Fractions by Fractions Divide Fractions by Integers 1 Divide Fractions by Integers 2 Four Rules with Fractions Fractions of Amounts Fractions of Amounts – Finding Whole

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Spr	Fractions and Ratio <u>Year 4</u> Efficient Multiplication Written Methods Multiply 2 by 1 Multiply 3 by 1 Multiply 3 by 1 Divide 3 by 1 Divide 3 by 1 Correspondence Problems <u>Year 5</u> To find the whole Convert mixed number and improper fractions Convert improper to mixed number fractions To add mixed number fractions To subtract mixed number fractions		Decimals and % <u>Year 4</u> Recognise tenths Tenths as decimals Tenths on place value grid Tenths on a number line Divide 1 digit by 10 Divide 1 digit by 10 Divide 2 digits by 10 Divide 2 digits by 10 Recognise hundredths Hundredths Hundredths as decimals Hundredths on a place value grid Divide 1 digit by 100 Divide 2 digit by 100 Divide 2 digit by 100 <u>Year5</u> Decimals to 2dp Decimals as fractions			Decimals and Algebra <u>Year 4</u> Make a whole Make a whole Compare Decimals Compare Decimals Order Decimals Order Decimals on a number line Round Decimals 1 Round Decimals 2 Halves Quarters <u>Year 5</u> Add decimals within 1 Complements to 1 Add decimals when crossing whole Add decimals with two decimals place		Measurement <u>Year 4</u> Pounds Pence Ordering amounts of money Rounding with money Estimating with money <u>Year 5</u> To convert kg and km To convert mg and ml To understand metric units To understand imperial units To convert units of time <u>Year 6</u>	Measurement <u>Year 4</u> Kilometres Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes Perimeter of rectilinear shapes What is area Counting Squares Making Shapes Comparing Area Comparing Area <u>Year 5</u> To calculate the perimeter To calculate the perimeter To calculate the area of a rectangle		Statistics <u>Year 4</u> Interpret charts Interpret charts Introduce Line Graphs To use line graphs to solve problems To use line graphs to solve problems To read and interpret bar charts and pictograms To read and interpret tables Comparison, sum and difference Comparison, sum and difference Comparison, sum and difference <u>Year 5</u> To read and interpret line graphs	

	To multiply fractions using an integer To find fractions of amounts To find fractions of amounts <u>Year 6</u> To understand what ratio means Introducing the ratio symbol To link ratio and fractions To link ratio and fractions To calculate ratio To understand using scale factors To calculate scale factors To solve ratio and proportion problems	Decimals as fractions Understand thousandths Thousandths as decimals Multiply by 10, 100 and 1000 Divide by 10, 100 and 1000 Round decimals Order & Compare Understand percentages Equivalent FDP Equivalent FDP Convert percentages as fractions and decimals Compare percentages as fractions and decimals Order FDP <u>Year 6</u> Decimals to 3dp Decimals as fractions Multiply decimals by integer Divide decimals by integer Division to solve problems Multiply by 10, 100 and 1000	Add decimals with different decimal place To subtract decimals within 1 To subtract decimals with same dp To subtract decimals with different dp To add and subtract wholes and decimals To identify decimal sequences <u>Year 6</u> Find rule using one step functions Find rule using two step functions To form expressions Understand substitution To use simple formulae To form equations To solve simple one step equations To solve two step equations	To use and apply metric measures To convert metric measures To calculate metric measures To convert with imperial units To convert miles and km	To find the area of irregular shapes To calculate the area of compound shapes To calculate the area of compound shapes To understand what volume is To compare volume To estimate the volume To estimate capacity <u>Year 6</u> To calculate the area and perimeter To calculate area and perimeter with missing values To solve area and perimeter problems To investigate shapes with the same area To calculate the area of a triangle To calculate the area of a triangle	To read and interpret line graphs To draw line graphs To use line graphs to solve problems To use line graphs to solve problems To read and interpret bar charts and pictograms To read and interpret tables To understand two way tables To read and interpret timetables To read and interpret timetables <u>Year 6</u> To read and interpret line graphs To read and interpret line graphs To draw line graphs To use line graphs to solve problems

			Divide by 10, 100 and 1000 Fractions to decimals Fractions to decimals Fractions to percentages Equivalent FDP Order FDP Percentages of amounts Percentages of amounts Identify missing values			To find pairs of values To enumerate possibilities			To calculate the area of a triangle To calculate the area of parallelograms To find the volume To calculate the volume of a cuboid		To use line graphs to solve problems To read and interpret pie charts To understand pie charts with percentages To draw pie charts To understand the mean as an average To understand circles	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Sum	Properties of shape <u>Year 4</u> To measure angles in degrees To measure angles with a protractor To measure angles with a protractor To identify angles To compare angles To compare angles To order angles			Position and direction <u>Year 4</u> Describe position To understand the first quadrant To understand the first quadrant To understand the first quadrant Draw on a grid Draw on a grid To translate shapes on a grid				Consolidation, revision and problem solving				

	To order angles Triangles Triangles Quadrilaterals Quadrilaterals Lines of symmetry Lines of symmetry Symmetrical Figure <u>Year 5</u> To measure angles in degrees To measure angles with a protractor To measure angles with a protractor To identify angles on a straight line To identify angles around a point To measure angles around a point To measure vertically opposite angles To find angles in shapes To identify angles in shapes To identify length and angles in shapes To understand angles in quadrilaterals	To translate shapes To translate shapes using coordinates To problem solve using position and direction <u>Year 5</u> To understand the first quadrant To understand the four quadrants To understand the four quadrants To understand coordinates in the four quadrants To investigate reflections To identify reflections with coordinates To translate shapes on a grid To translate shapes To translate shapes using coordinates To problem solve using position and direction <u>Year 6</u> To understand the first quadrant To understand the four quadrants To understand the four quadrants	

	To investigate regular and irregular polygons To investigate angles in polygons To draw lines and angles accurately To understand 3D shapes <u>Year 6</u> To measure angles in degrees To measure angles with a protractor To measure angles with a protractor To identify angles on a straight line To identify angles around a point To measure angles around a point To measure vertically opposite angles To find angles in triangles To find angles in triangles To identify angles in triangles To understand angles in quadrilaterals To investigate regular and irregular polygons To investigate angles in polygons To draw shapes accurately To draw nets of 3D shapes	To understand coordinates in the four quadrants To investigate reflections To identify reflections with coordinates To translate shapes on a grid To translate shapes To translate shapes using coordinates To problem solve using position and direction	

Swarland Primary School Long Term Plan For LKS2 Music.

In the absence of a specialist music tutor, the following plan will be taught:

	Autumn	Spring	Summer
CYCLE A	**China (Pitch 7-8) Ancient worlds (Structure 7-8) Sound (Sound 7-8) Poetry (Performance 7-8)** • Sing Heads and Shoulders / Candle Light. • Sing confidently and expressively in a group. • Listen to Night on Bare Mountain-Mussorgsky / Hallelujah from Messiah – Handel. • Control their voice when singing in unison - 5 note range. • Breathe in the correct place when singing • Understand pitch through composition. • Understand pentatonic scales. • To develop the confidence to perform in front of others • Sing songs as a group, keeping in time • Sing in tune with expression. • Read and use graphic notation. • Play clear notes on instruments. • How sounds are produced. • Classifying instruments. • Learning about idiophones • Develop understanding of call and response. • Learning about chordophones	**Poetry (Performance 8-9) Food and drink (Performance 7-8) French (Pitch 7-8) Food and drink (Performance 8-9)** • Sing Pease Pudding Hot / Long Journey • Know that phrases are where we breathe in a song. • Listen to I got you – James Brown / Le Freak - Chic • Using canon and ostinato as accompaniments. • Building an extended performance piece • Musical notation with reference to metre and accent • Vocal beatbox accompaniments to rap • Choose the most appropriate tempo for the music • Understanding pitch through melody, singing and playing. • Recognising pitch shapes • Reading notation to play a melody	**Environment (Composition 7-8) Communication (Composition 8-9) Spanish (Pitch 8-9)** • Sing Skye Boat Song or Now charia de. (A Boatman's song) / Extreme Weather. • Listen to Tropical Bird – Trinidad Steel Band. / Jai Ho – A.R Rahman • Use musical words to describe elements of music to describe a piece of music and compositions. • Use musical words to describe what they like and dislike. • Singing in a two-part harmony • Singing with expression • Explore timbre to create description. • Perform in a rondo structure. Learn about ternary structure. • Harmony (drone) • Dynamics Loud (forte) Quiet (piano) • Contrast the work of famous composers and show preferences. • Suggest improvements to their own work. • Using music to communicate meaning. • Pitch range 8 notes. Do-do. • Composing a rap • Playing ostinato and layering them in a performance. • Copying rhythms and short melodies. • Chords and baselines (static / moving)

CYCLE B			
	Ancient World (Structure 8-9) In the past (Notation 8-9) In the past (Pitch 7-8) • Sing Servant King / World in Union. • Sing confidently as a group in tune. 8 note range. • Listen to Beauty of the Earth - Rutter / Symphony No. 5 - Beethoven. • Understand melodies have phrases. • Exploring layering • Contrasting structure • Combining sections of music. • Playing in groups. • Evaluate work and suggest improvements. • Composing a fanfare • Learning to play from notation. • Playing music used for celebrations • Creating a performance.	**Sound (Sound 8-9) Communication (Composition 7-8) Time (Beat 7-8) Environment (Composition 8-9)** • Sing Just like a Roman / Lost in Space or Shadows. • Listen to Take the A train – Billy Strayhorn / Wonderwall - Oasis. • Follow traditional notation for simple rhythms. • Instrument classification on sound • Sing partner songs. • Learn about aerophones. • Combine different instrument groups for expressive effect. • Understand elements of traditional musical notation e.g time signature, flats, sharps, bars • Identify the metre in a piece of music • Playing independent parts in more than one metre • Improvising to an ostinato • Performing rhythmic ostinato • Layering rhythms • Recognising rhythm patterns in staff notation.	**Time (Beat 8-9) Around the world (Pitch 8-9) Human body (Structure 7-8) Building (Beat 7-8)** • Sing Namamu / Calypso. • Listen to Bhabiye Akh Larr Gayee – Bhujhangy Group / Sahela Re – Kishori Amonkar • Identify the metre of a song • Singing in three independent parts • Playing ostinato from notation. • Understand syncopation and using off beat rhythms. • Combining parts in more than one metre. • Creating music to tell a story. • Analyse features within the music. • Exploring sound • Singing in two parts • Performing call and response structure • Understanding and performing binary form

Swarland Primary School Long Term Plan For UKS2 Music.

In the absence of a specialist music tutor, the following plan will be taught:

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

CYCLE A	At the Movies (9-10) Roots (10-11)	Keeping Healthy (9-10) Journeys (10-11)	World Unite (10-11) Our Community (9-10)
	• Sing Rocky Mountain - Koldaly. / 'We go together'. • Listen to Folk Song Suite -Vaughan Williams / 'This Little Babe' - Britten • Sing partner songs confidently. • Understand music narrative. • Interpreting notation • Using a storyboard to structure sound • Learning about sound effects in movies • Composing sound effects to perform with a movie. • Using narrative structure • Identifying changes in tempo and their effect • Perform a sequence of melodic phrases. • Understand phrase structure. • Explore the effects of music on movies. • Use musical dimensions to create and perform music. • Techniques used in movie soundtracks. • Evaluate and refine compositions. • Using cue scores • Work in groups to create descriptive movie music • Breathe in the correct place when singing. • Contrast the work of famous composers and show preferences. • Improvising descriptive music • Singing a traditional Ghanian game song • Play rhythm cycles. • Combine rhythm cycles in a percussion piece. • Sing call and response songs in two groups. • Devise rhythmic movement. • Combine songs with rhythmic pieces.	• Sing Are you ready? / 'There's a power in the Music' -Sing Up. • Know that phrases are where we breathe in a song. • Listen to Say my name – Destiny's Child / 'Small town boy' – Bronski Beat • Singing in three-part harmonies • Sing in unison and two parts. • Exploring beat at different tempi • Singing syncopated melodies • Develop rhythm skills through singing, playing and moving. • Singing and playing scales and chromatic melodies • Accompany songs with sung and played drones. • Develop arrangements and create accompaniments. • Reading staff notation to play baseline • Explore expressive singing in a song with echoes. • Develop song cycles for performance. • Staging a performance with awareness of audience • Singing major and minor note patterns • Understanding the structure of a pop song	• Sing My paddle Kodály / Row Row Row your boat. / 'Senwa de Dende' • Sing Four white horses – Caribbean. • Listen to Sea Shanties - various. / 'Sprinting Gazelle' – Reem Kelani • Exploring beat and syncopation through song and body percussion • Develop coordination and rhythm skills. • Performing a rhythmic sequence • Develop pitch shape and link to movement. • Understanding pitch through notation • Create rhythm patterns. • Arranging musical sections to build a large performance. • Combining rhythms. • Conducting a metre of 2,3, 4 • Writing lyrics • Extending arrangements • Singing songs from our musical heritage • Using invented or improvised rhythms • Rehearsing for a performance • Performing with awareness of audience

CYCLE B	Celebration. (9-10) Growth (10-11)	Class Awards (10-11) Solar System (9-10)	Life Cycles (9-10) Moving On (10-11)
	• Sing We are the Champions. / 'Ally Ally O' • Listen to 1812 Overture - Tchaikovsky / 'Connect It' – Anna Meredith • Singing a song in unison and three part harmony • Sing syncopated rhythms. • Learning a melody and harmony part on an instrument to accompany a song • Performing ostinati and body percussion accompaniments • Exploring song arrangements and structure • Performing a song with a complex structure and in four parts • Song performance with awareness of audience • Using a song structure • Applying singing techniques to improve performance. • Develop accurate ensemble singing. • Controlling short, loud sounds on instruments • Rehearse and improve. • Moving to a three-beat pulse • Improvising rhythmic and melodic ostinato • Sing in harmony. • Learn about chords. • Performing music and dance • Rehearing and developing music for performance. • Understand process of musical performance	• Sing High Low Chickalo. / 'Touch the Sky' -Sing up. • Listen to Play Dead - Bjork / 'Libertango' – Piazzolla • Learning music for a special occasion • Composing programme music from a visual stimulus • Writing new verses • Singing a verse and chorus song • Performing together • Developing an extended performance • Developing a song arrangement • Interpreting images to create descriptive sounds scenes. • Listen with focus upon composition – using musical vocabulary. • Develop use of dynamics • Listen with focus upon dynamics and texture. • Listening to melodic ostinato using staff notation. • Learning songs with a complex texture. • Sounds in a whole tone scale. • Perform with attention on tone and phrasing	• Sing the National Anthem. / 'Dipidu'. • Listen to Jin-Go-La-Ba by Babatunde Olatunji / 'Inkanyezi Nezazi' – Lady Black Mambazo. • Singing in two and three parts • Singing a song with expression and sustained notes • Singing two part or three-part harmony • Reading a melody in staff notation • Accompany a song with tuned instruments. • Compose and perform together. • Combining vocal sounds • Creating performance in four parts • Develop structure to combine sounds. • Extend vocal technique. • Using contrasting pitch, create musical effects. • Develop performance with awareness of audience. • Learn about early opera. • Performing complex song rhythms confidently • Identifying the structure of a piece of music • Learning to play a melody with chordal accompaniment. • Experiencing the effect of harmony changing • Listen to and understand modulation in a musical bridge

Swarland Primary School Long Term Plan For KS2 Modern Foreign Languages (French)						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
CYCLE A Y3 &	• Introduction to sounds of language • Greetings • Colour adjectives, Christmas masculine nouns and classroom command verbs • Simple sentence with a connective		• Introduction to letter and sound correspondences • Gender of nouns and plurals • Counting items in a pencil case • Asking and saying name		• Developing understanding of letter and sound correspondences • Simple sentences in the positive and negative using it is and it is not • Animal nouns and colour adjectives • Asking questions • Using a bi-lingual dictionary	
CYCLE B Y3 & 4	• Introduction to sounds of language • Greetings and feelings • Colour adjectives and Christmas feminine nouns • Simple sentence with a connective		• Introduction to letter and sound correspondences • Gender of nouns and plurals • Counting items of clothing • Say what you are putting on and ask others		• Developing understanding of letter and sound correspondences • Simple sentences in the positive and negative using I have and I have not • Position of colour adjectives with animal nouns • Asking questions	

The content of this 2-year cycle prepares children to be able to:

- recognise the sounds of the French language as well as the sound of some letter strings
- speak, understand, read and write short sentences and questions
- understand simple grammatical concepts and recognise some language patterns
- join in with some familiar stories and recite some finger rhymes from memory

	Project 1	Project 2	Project 3
CYCLE A Y5 & 6	Create a **Shape Book** using knowledge of: • sentence building with nouns, colour and size adjectives and negatives • correspondence of letters to sound • use of a bi-lingual dictionary	Write a **Colour Poem** using knowledge of: • sentence building with singular and plural nouns and the definite article • correspondence of letters to sound • use of a bi-lingual dictionary	Write a **Monster Description** using knowledge of: • sentence building with plural nouns, the indefinite article, agreement and position of adjectives in the singular and plural • correspondence of letters to sound • use of a bi-lingual dictionary
	Project 4	**Project 5**	
CYCLE A Y5 & 6	Create a **Fact File Mini-book** about themselves using knowledge of: • sentence building with regular and irregular verbs, the indefinite article, negatives and the agreement and position of adjectives • asking questions • correspondence of letters to sound • use of a bi-lingual dictionary	Create a **Lift the Flap animal book** using knowledge of: • sentence building with regular verbs in the singular and plural, negatives, the indefinite article and the agreement and position of adjectives • correspondence of letters to sound • use of a bi-lingual dictionary	
	Project 1	**Project 2**	**Project 3**
CYCLE B Y5 & 6	Design an E**xtraordinary Animal** using knowledge of: • sentence building with nouns, colour and size adjectives and negatives • correspondence of letters to sound • use of a bi-lingual dictionary	Design a cartoon version of the story **Bon Appétit Monsieur Lapin** using knowledge of: • sentence building with singular and plural nouns, the partitive article and 1st and 2nd person -er verbs • correspondence of letters to sound • use of a bi-lingual dictionary	Write a mini-book of **The Hungry Monster** using knowledge of: • sentence building with plural nouns, the partitive article and the indefinite article • correspondence of letters to sound • use of a bi-lingual dictionary
	Project 4	**Project 5**	

CYCLE B Y5 & 6	Design a **Birthday Book** using knowledge of: • sentence building with dates, numbers and questions • correspondence of letters to sound • use of a bi-lingual dictionary	Write a **Sequence Poem** using knowledge of: • sentence building with the indefinite and definite article, singular and plural nouns and prepositions • correspondence of letters to sound • use of a bi-lingual dictionary	

The content of this 2-year cycle prepares children to be able to:

- recognise and produce the sound of many letter strings in words and sentences with confident pronunciation
- speak, understand, read and write a complex sentence by manipulating familiar language
- ask a variety of questions
- apply knowledge of basic grammatical concepts to speak and write
- follow a simple story or song and read aloud

Swarland Primary School Long Term Plan For LKS2 English

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
LKS2 CYCLE A	**Theme: Iron Age** Focus text - The Iron Man By Ted Hughs Genre/text type - Narrative Poetry Writing monologues	**Theme: Classic stories** Focus text - The lion, the witch and the wardrobe - C.S.Lewis Genre/text type - Classic stories fantasy/imaginative descriptive writing Figurative language focus First person narrative Balanced argument Christmas poetry	**Theme: Myths and legends** Focus texts - the eye of the wolf - Daniel Pennac The One and Only Ivan by Katherine Applegate; Gorilla and Zoo by Anthony Browne Genre/text type - Playscripts Narrative Informative writing Setting and character focus Poetry	**Theme: Tornados** Focus texts - The wizard of Oz - L.Frank Baum The miraculous journey of Edward Tulane - Kate DiCamillo Genre/text type - Narrative writing Letter writing Journalistic writing Poetry	**Theme: Vikings and Invaders** Focus Texts – How to train your dragon By Cressida Cowell How to be a Viking By Cressida Cowell Genre/text type - Viking Britain – non fiction writing. Recounts of the Battle of Hastings – the Norman Conquest in 1066. Roleplay/drama the story of the Vikings. Fact files Non-chronological reports	**Theme: Water** Focus texts - Grace Darling Titanic Hello Lighthouse By Sophie Blackall Flotsam by David Wiesner Poetry - Under the moon and over the sea – various authors. Genre/text type - Report writing Diary writing Short stories role play and drama and explanations. persuasive writing Writing synopsis Informal letters newspaper

LKS2 CYCLE B	**Theme: Stone Age** Focus texts - Cave baby – Julia Donaldson Stig of the dump – Clive King Stone age boy – Satoshi Kitamura Stone age girl - Laurence Anholt The Croods and The Flintstones used as hooks Genre/text type - plot , character and setting Non-fiction writing Diary writing Information writing Biographies Newspaper writing	**Theme: Christmas** Focus texts - One Christmas wish - Katherine Rundell Genre/text type - Story openers Story retelling Alternative endings Character points of views Christmas poetry	**Theme: Romans** Focus texts - Escape from Pompeii Christina Balit The Orchard Book Of Roman Myths Geraldine McCaughrean & Emma Chichester Clark Romans on the Rampage Jeremy Strong Romans Ruled: Fun poems for kids about Ancient Romeo by Paul Perro Genre/text type - Recounts story board of Boudicca Imaginative story writing Diary writing	**Theme: Magic of children's stories** Focus texts - Charlie and the chocolate factory Danny, the champion of the world Esio Trot - Roald Dahl Genre/text type - Recipe writing Instruction writing Narratives Explanations Letter writing Descriptive writing Recounts	**Theme: Anglo Saxons** Focus texts - Beowulf (Usborne) Rob Lloyd Jones & Victor Tavares The King Who Threw Away His Throne Terry Deary Anglo Saxon Riddles Genre/text type - Imaginative, fantasy writing Book reviews. Play scripts re-enacting plays using scripts filming dramas	**Theme: Twisted traditional tales** Focus texts - Jim and the beanstalk - Raymond Briggs Revolting rhymes - Roald Dahl Fearless fairytales Into the forest - Anthony Browne The pea and the princess Gotcha! Goldilocks on CCTV Charming! Genre/text type - Links to cultural topics and local tales Dialogue 5 part story writing Alternative endings and openings to traditional fairytales

U K S 2 C Y C L E A	**Focus Text:** **The Boy with the Bronze Axe - Kathleen Fiddler** **Genre/Text Type:** **Narrative - Mystery** **Balanced Argument** **Short Dialogue** **Non Chronological Report** **Fable** **Poetry**	**Focus Text:** **Kensuke's Kingdom - Michael Murpurgo** **Genre/Text Type:** **Narrative - Adventure** **Persuasive Writing** **Newspaper Report** **Setting Description** **Non Chronological Report** **Poetry**	**Focus Text:** **Treason - Berlie Doherty** **Macbeth (A Shakespeare Story) - Andrew Matthews& Tony Ross** **Genre/Text Type:** **Letter Writing** **Instructions** **Newspaper Report** **Balanced Argument** **Narrative - Suspense** **Persuasive Leaflet** **Poetry**
U K S 2	**Focus Text:** **The Girl With Ink Stars - Kiran Millwood Hargrave** **Genre/Text Type:** **Greek Myth** **Non Chronological Report**	**Focus Text:** **War Horse - Michael Murpurgo** **Genre/Text Type:** **Diary Entry** **Persuasive Writing** **Narrative**	**Focus Text:** **Floodland - Marcus Sedgwick** **Genre/Text Type:** **Narrative - Tale of Fear** **Recount** **Information Text**

CYCLE B	Balanced Argument Narrative Using Speech Poetry Information Text	Newspaper Report Biography Poetry	Setting Description Poetry Murder Mystery

Swarland Primary School Long Term Plan For Design Technology						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

LKS2 CYCLE A	**Design and create an electronic poster for an artefact display** **Key Knowledge** • To understand that an electrical system is a group of parts (components) that work together to transport electricity around a circuit. • To understand common features of an electric product (switch, battery or plug, dials, buttons etc.) • To list examples of common electric products (kettle, remote control etc.) • To understand that an electric product uses an electrical system to work (function). • To know the name and appearance of a bulb, battery, battery holder, crocodile clip and wire to build simple and parallel circuits. **Key skills and techniques** • Carrying out research based on a given topic to develop a range of initial ideas. • Generating a final design for the electric poster with consideration for the client's needs and design criteria. • Planning the positioning of the bulb (circuit component) and its purpose. • Mounting the poster onto corrugated card to improve its strength and withstand the weight of the circuit on the rear. • Measuring and marking materials out using a template or ruler. • Fitting an electrical component (bulb) in series or parallel circuits. • Learning ways to give the final product a higher quality finish (e.g. framing to conceal a roughly cut edge). • Learning to give and accept constructive criticism on own work and the work of others. • Testing the success of initial ideas against the design criteria and justifying opinions. • Revisiting the requirements of the client to review developing design ideas and check that they fulfil their needs. **Vocabulary** Information design, design, public, design criteria, research, initial ideas, sketch, bulb, self assessment, peer assessment, feedback, develop, final design, electric, system, electric product, circuit, circuit component, bulb, battery, wires.	**Design and create a free standing stable photograph frame suitable to show your best picture of yourself.** **Key Knowledge** • Handle a range of existing products and evaluate what they like and dislike about them. • Disassemble and assemble to know how they are stable and shapes which allow free standing including A-stance and T-stance. • Use this knowledge to generate own design criteria to establish if product is successful. • Know who the frame is for and it's purpose. • Investigate and problem solve which material and structure shape is most stable. **Key Skills and techniques** • Apply knowledge of how to stiffen, strengthen and reinforce more complex structure. • Select appropriate materials, tools and techniques. • Measure and mark out accurately. • Use skills in using different tools and equipment safely and accurately. • Know which finishing techniques will give best aesthetic appearance and longevity. • Evaluate their own product and that of others against design criteria. **Vocabulary** Information design, design, public, design criteria, research, initial ideas, sketch,triangle, photo frame, unique, structure, strongest, stable, stiffen, free-standing, reinforce, stance, self assessment, peer assessment, feedback, develop, final design.	**To design and create a product linked with the cuisine of the cultural topic country.** **Key Knowledge** • That the amount of an ingredient in a recipe is known as the 'quantity'. • That safety and hygiene are important when cooking. • The following cooking techniques: sieving, measuring, mixing/stirring, cutting out and shaping. • The importance of budgeting while planning ingredients for a recipe. • That products often have a target audience. **Key skills and techniques** • Evaluating and comparing a range of products. • Following a baking recipe. • Understanding safety and hygiene rules. • Identifying a target audience. • Designing a biscuit within a given budget. • Suggesting modifications. • Adapting a recipe. • Conducting market research. • Evaluating an adapted recipe. **Vocabulary** Adapt, addition, appearance, budget, buttery, combine, comment, compare, construct, cream, crunchy, cuboid, cut, design, evaluate, fold, hygiene, ingredients, layout, market research, modify, multiplication, opinion, pounds, sieve, sift, target audience, taste, texture, unique, silicon spoon.

L K S 2 C Y C L E B	**Digital World: Wearable Technology - Programming & CAD** **Key Knowledge** • To understand that, in programming, a 'loop' is code that repeats something again and again until stopped. • To know that a micro:bit is a pocket-sized, codeable computer. • To know that a simulator is able to replicate the functions of an existing piece of technology. • To know what the 'Digital revolution' is and features of some of the products that have evolved as a result. • To understand what is meant by 'point of sale display.' • To know that CAD stands for 'Computer-aided design'. • To know what a focus group is by taking part in one. **Skills and techniques** • Problem solving by suggesting potential features on a micro:bit and justifying my ideas. • Drawing and manipulating 2D shapes, using computer-aided design, to produce a point of sale badge. • Developing design ideas through annotated sketches to create a product concept. • Developing design criteria to respond to a design brief. • Following a list of design requirements. • Writing a program to control (button press) and/or monitor (sense light) that will initiate a flashing LED algorithm. • Analysing and evaluating an existing product. • Using feedback from peers to improve a design. **Vocabulary** Analogue, analyse, annotate, badge, computer-aided design (CAD), control, design criteria, develop, digital, digital revolution, digital world, display, electronic, electronic products, fastening, feature, feedback, form, function, initiate, layers, monitor, net, opinion, point	**Mechanisms: Levers** **To design and create a catapult.** **Key Knowledge** • Know how catapults work and function through research including historical ideas – noting key events and individuals in DT that have helped shape their world. • To know that CAD stands for 'Computer-aided design'. **Skills and techniques** • Generate ideas and communicate these through detailed sketches including cross sections, exploded diagrams and computer aided design. • Create prototypes and model ideas, testing out functionality. Apply knowledge of how to stiffen, strengthen and reinforce complex structures, use and understand mechanical systems such as levers and pulleys, gears, cam etc. S • elect and use a wider range of tools and equipment giving reasons for choices according to their knowledge of functional and aesthetic qualities. • From previous experience select appropriate structures/mechanisms for purpose. • Evaluate for strengths and weaknesses, carry out tests, implement improvements. **Vocabulary** Analyse, annotate, research, computer-aided design, product, base, arm, frame, strengthen, stiffen, anchor, propel, fulcrum, bucket, arm, restraining rope, prototype,	**Textiles: Fastenings & Cushions decorative stitching** **To design and create a book cover.** **Key Knowledge** • To know that a fastening is something that holds two pieces of material together. • To know that different fastening types are useful for different purposes. • To know that creating a mock-up (prototype) of their design is useful for checking ideas and proportions. • Appliqué is a way of mending or decorating a textile by applying smaller pieces of fabric. • When two edges of fabric have been joined together, it is called a seam. • It is important to leave space on the fabric for the seam. • Some products are turned inside out after sewing so the stitching is hidden. **Skills and techniques** • Writing design criteria for a product, articulating decisions made. • Designing a personalised book sleeve. • Applying individual design criteria to their book sleeve mock-up. • Following design criteria to create a book sleeve. • Making and testing a paper template with accuracy and in keeping with the design criteria. • Measuring, marking and cutting fabric using a paper template. • Selecting a stitch style to join fabric. Sewing neatly using small regular stitches. • Threading needles with greater independence. Tying knots with greater independence. • Sewing cross-stitch to join fabric. Decorating fabric using appliqué. • Selecting and cutting fabrics with ease using fabric scissors. • Incorporating a fastening to a design. • Testing and evaluating an end product against the original design criteria. **Vocabulary**

	of sale, product, product design, program, sense, simulator, smart, technology, test, user.		Accurate, appliqué, cross-stitch, design, embellish, fabric, patch, running stitch, seam, template, thread, criteria, fastening, fix, mock-up.

U K S 2 C Y C L E	**Mechanisms: Automata - Cams** **To design and create an automata toy for a window display.** • Mark, saw and cut out the components and supports of their toy with varying degrees of accuracy to the intended measurements. • Follow health and safety rules, taking care with the equipment. • Attempt a partial assembly of their toys using an exploded diagram following a teacher's demonstration. • Develop a design idea with some descriptive notes. • Explore different cam profiles and choose three for their follower toppers with an explanation of their choices. • Create neat, decorated follower toppers with some accuracy. • Measure and cut panels that fit with some inaccuracies to conceal the inner workings of the automata. • Decorate and finish the automata to meet the design criteria and brief. • Evaluate their finished product, making descriptive and reflective points on function and form. **Vocabulary** Accurate, automata, axle, bench hook, cam, cam profile, component, cross-sectional diagram, diagram, dowel, evaluate, exploded diagram, follower ,form ,frame ,function ,housing, mechanism, storefront, visual	**Nutrition: Come dine with me - Greek style** **Key Knowledge** • That 'flavour' is how a food or drink tastes. • That many countries have 'national dishes' which are recipes associated with that country. • That 'processed food' means food that has been put through multiple changes in a factory. • That it is important to wash fruit and vegetables before eating to remove any dirt and insecticides. • What happens to a certain food before it appears on the supermarket shelf (farm to fork). **Key skills and techniques** • Writing a recipe, explaining the key steps, method and ingredients. • Including facts and drawings from research undertaken. • Following a recipe, including using the correct quantities of each ingredient. • Adapting a recipe based on research. Working to a given timescale. • Working safely and hygienically with independence. • Evaluating a recipe, considering: taste, smell, texture and origin of the food group. • Taste testing and scoring final products. • Suggesting and writing up points of improvements in productions.	**Electrical systems: Doodlers** **To design and construct a doodler.** **Key Knowledge** • To know that, in a series circuit, electricity only flows in one direction. • To know when there is a break in a series circuit, all components turn off. • To know that an electric motor converts electrical energy into rotational movement, causing the motor's axle to spin. • To know a motorised product is one which uses a motor to function. **Key skills and techniques** • Identifying factors that could be changed on existing products and explaining how these would alter the form and function of the product. • Developing design criteria based on findings from investigating existing products. • Developing design criteria that clarifies the target user. • Altering a product's form and function by tinkering with its configuration. • Making a functional series circuit, incorporating a motor. • Constructing a product with consideration for the design criteria.

A		• Evaluating health and safety in production to minimise cross contamination. **Vocabulary** Balance, bitter, bridge method, complement, cookbook, cross-contamination, enhance, equipment, farm to fork, flavours, ingredients, method, research, pairing, recipe, preparation, salty, sour, storyboard, sweet, umami.	• Breaking down the construction process into steps so that others can make the product. • Carry out a product analysis to look at the purpose of a product along with its strengths and weaknesses. • Determining which parts of a product affect its function and which parts affect its form. • Analysing whether changes in configuration positively or negatively affect an existing product. • Peer evaluating a set of instructions to build a product. **Vocabulary**

U K S 2 C Y C L E	**Structures: Bridges -> playground** **Key Knowledge** • To understand some different ways to reinforce structures. • To understand how triangles can be used to reinforce bridges. • To know that properties are words that describe the form and function of materials. • To understand why material selection is important based on their properties. • To understand the material (functional and aesthetic) properties of wood. **Key skills and techniques** • Designing a stable structure that is able to support weight. • Creating a frame structure with focus on triangulation. • Making a range of different shaped beam bridges. Using triangles to create truss bridges that span a given distance and support a load. • Building a wooden bridge structure. • Independently measuring and marking wood accurately. Selecting appropriate tools and equipment for particular tasks.	**Textiles: Waistcoats** **Key Knowledge** • To understand that it is important to design clothing with the client/target customer in mind. • To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric. • To understand the importance of consistently sized stitches. **Key skills and techniques** • Designing a waistcoat in accordance with a specification and design criteria to fit a specific theme. • Annotating designs. Using a template when pinning panels onto fabric. • Marking and cutting fabric accurately, in accordance with a design. • Sewing a strong running stitch, making small, neat stitches and following the edge. • Tying strong knots. Decorating a waistcoat – attaching objects using thread and adding a secure fastening. • Learning different decorative stitches. • Sewing accurately with even regularity of stitches. • Evaluating work continually as it is created. **Vocabulary** Annotate, decorate, design criteria, fabric, target customer, waistcoat, waterproof	**Digital world: Navigating the world** **Key Knowledge** • To know that accelerometers can detect movement. • To understand that sensors can be useful in products as they mean the product can function without human input. • To know that designers write design briefs and develop design criteria to enable them to fulfil a client's request. • To know that 'multifunctional' means an object or product has more than one function. • To know that magnetometers are devices that measure the Earth's magnetic field to determine which direction you are facing. **Key skills and techniques** • Writing a design brief from information submitted by a client. • Developing design criteria to fulfil the client's request. • Developing a product idea through annotated sketches. Placing and manoeuvring 3D objects, using CAD. • Changing the properties of, or combine one or more 3D objects, using CAD.

B	• Using the correct techniques to saw safely. Identifying where a structure needs reinforcement and using card corners for support. • Explaining why selecting appropriate materials is an important part of the design process. • Understanding basic wood functional properties. • Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary. • Suggesting points for improvements for own bridges and those designed by others. **Vocabulary** Lamination, stiffness, rigid, factors, stability, visual appeal, aesthetics, joints, mark out, hardwood, softwood, wood file/rasp, sandpaper/glasspaper, bench hook/vice, tenon saw/coping saw, assemble, material properties, reinforce, wood sourcing, evaluate, quality of finish, accuracy.		• Considering materials and their functional properties, especially those that are sustainable and recyclable (for example, cork and bamboo). • Explaining material choices and why they were chosen as part of a product concept. • Programming an N,E, S,W cardinal compass. • Explaining how my program fits the design criteria and how it would be useful as part of a navigation tool. • Developing an awareness of sustainable design. • Explaining the key functions and features of my navigation tool to the client as part of a product concept pitch. • Demonstrating a functional program as part of a product concept. **Vocabulary** Smart, smartphone, equipment, navigation, cardinal, compass, application (apps), pedometer, GPS tracker, design brief, design criteria, client, function, program, duplicate, replica, loop, variable, value, if statement, boolean, corrode, mouldable, lightweight, sustainable design environmentally friendly, biodegradable, recyclable.

Swarland Primary School Long Term Plan For Lower KS2 Art			
	Autumn	**Spring**	**Summer**

CYCLE A	**Theme: Painting and mixed media. - Light and dark** Developing colour mixing skills, using shades and tints to show form and create three dimensions when painting. Pupils learn about composition and plan their own still life to paint, applying chosen techniques. **Outcomes:** • Share their ideas about a painting. • Describe the difference between a tint and a shade. • Mix tints and shades by adding black or white paint. • Discuss their real-life experiences of how colours can appear different. • Use tints and shades to paint an object in 3D. • Try different arrangements of objects for a composition, explaining their decisions. • Produce a clear sketch that reflects the arrangement of their objects. • Create a final painting that shows an understanding of how colour can be used to show light and dark, and therefore show three dimensions. • Paint with care and control to make a still life with recognisable objects. **Vocab:** Abstract, composition, contrasting, dabbing, paint, detailed, figurative, formal, grid, landscape, mark-making, muted, paint wash, patterned, pointillism, portrait, shade, shadow, stippling paint, technique, texture, three, dimensional (3D), tint, vivid **Key artists:**	**Theme: Sculpture & 3D. - Abstract shape and space.** Exploring how shapes and negative spaces can be represented by three dimensional forms. Manipulating a range of materials, children learn ways to join and create free-standing structures inspired by the work of Anthony Caro and Ruth Asawa. . **Outcomes:** • Try out different ways to make card shapes three dimensional, e.g. folding and curving the card or joining the flat shapes together. • Make a structure that holds its 3D shape. • Explain in simple terms the difference between 2D and 3D art. • Combine shapes together to make an interesting free-standing sculpture. • Try out more than one way to create joins between shapes. • Identify familiar 2D shapes in photographs. • Identify shapes in the negative space between objects. • Draw a cardboard model from different angles, focusing on shapes in the positive and negative space to achieve an abstract effect. • Plan an abstract sculpture based on play equipment. Show that they have learned how to shape materials in more than one way (e.g. by folding and rolling). • Choose appropriate methods for joining elements in their sculptures. • Show that they have thought about how to improve their sculptures and made choices about what to add. Work cooperatively in pairs to add detail to their artwork. **Vocab**: abstract, found objects, negative space, positive space, sculptor, sculpture, structure, Three-dimensional **Key artists:**	**Theme:Drawing - Power prints.** Using everyday electrical items as a starting point, pupils develop an awareness of composition in drawing and combine media for effect when developing a drawing into a print **Outcomes:** Create several pencil tones when shading and create a simple 3D effect. Explore the effect of holding a pencil in different ways and applying different pressures. • Use charcoal and rubber to show areas of light and dark in their drawings. • Demonstrate an awareness of the relative size of the objects they draw. • Use scissors with care and purpose to cut out images. • Try out multiple arrangements of cut images to decide on their composition. • Use different tools to create marks and patterns when scratching into a painted surface. • Show some awareness of how to create contrast by including areas with more and less marks. • Create an interesting finished drawing based on their original composition, including detail such as contrast and pattern. • Work co-operatively to create a joint artwork, experimenting with their methods. **Vocab:** abstract, block print, collaborate, collaboratively, collage, combine, composition, contrast, cross-hatching, figurative, gradient, hatching, highlight mixed media, monoprint, observational drawing, parallel, pattern, precision, printmaking, proportion, shading, shadow, symmetry, three dimensional (3D), tone, viewfinder, wax-resist **Key artists:**

CYCLE B	**Theme: Painting and mixed media -Prehistoric Paintings** Investigating making their own paints, making tools and painting on different surfaces, the children explore prehistoric art. **Outcomes:** • Recognise the processes involved in creating prehistoric art. • Explain approximately how many years ago prehistoric art was produced. • Use simple shapes to build initial sketches. • Create a large scale copy of a small sketch. • Use charcoal to recreate the style of cave artists. • Demonstrate good understanding of colour mixing with natural pigments. • Discuss the differences between prehistoric and modern paint. • Make choices about equipment or paint to recreate features of prehistoric art, experimenting with colours and textures. • Successfully make positive and negative handprints in a range of colours. • Apply their knowledge of colour mixing to make natural colours. **Vocab:**charcoal, composition, negative image, pigment, positive, image, proportion, scaled up, sketch, smudging, texture, tone, prehistoric **Key artists:**	**Theme: Drawing - Growing artists.** Using botanical drawings and scientific plant studies as inspiration, pupils explore the techniques of artists such as Georgia O'Keefe and Maud Purdy to draw natural forms, becoming aware of differences in the choice of drawing medium, scale and the way tonal shading can help create form. **Outcomes:** • Know the difference between organic and geometric shapes. • Use simple shapes to form the basis of a detailed drawing. • Use shading to demonstrate a sense of light and dark in their work. • Shade with a reasonable degree of accuracy and skill. • Blend tones smoothly and follow the four shading rules. • Collect a varied range of textures using frottage. • Use tools competently, being willing to experiment. Generate ideas mostly independently and make decisions to compose an interesting frottage image • . Make considered cuts and tears to create their ideas. • Understand how to apply tone, with some guidance about where to use it. • Draw a framed selection of an image onto a large scale with some guidance. • Try a range of drawing materials, beginning to demonstrate expressive marks by trying tools in an interesting way. **Vocab:** abstract, arrangement, blend, botanical, botanist, composition, cut, dark, even,expressive, form, frame, frottage, geometric, gestural, grip, light, line, magnified, organic, object, pressure, rubbing, scale, scientific, shading, shape, smooth, surface, tear, texture, tone, tool. **Key artists:**	**Theme: Craft and design - Fabric of nature.** Using flora and fauna of tropical rainforests as a starting point, children develop drawings through experimentation and textile-based techniques to design a repeating pattern suitable for fabric. **Outcomes:** • Describe objects, images and sounds with relevant subject vocabulary. • Create drawings that replicate a selected image. • Select imagery and colours to create a mood board with a defined theme and colour palette. • Complete four drawings, created with confident use of materials and tools to add colour. • Understand the work of William Morris, using subject vocabulary to describe his work and style. • Create a pattern using their drawing, taking inspiration from mood boards and initial research to develop it. • Identify and explain where a pattern repeats. Follow instructions to create a repeating pattern, adding extra detail. • Understand different methods of creating printed fabric in creative industries. • Use sketchbooks to evaluate patterns. • Produce ideas to illustrate products using their designs. **Vocab:** Batik, colour palette, craft, craftsperson, design, develop, designer, imagery, industry, inspiration, mood board, organic, pattern, repeat, repeating, rainforest, symmetrical, texture, theme. **Key artists:**

Swarland Primary School Long Term Plan For Upper KS2 Art			
	Autumn	**Spring**	**Summer**

CYCLE A	Theme: Sculpture and 3D - Interactive installations	Theme: Painting and mixed media - Portraits.	Theme: Drawing - Make my voice heard.
	Using inspiration from historical monuments and modern installations, children plan by researching and drawing a sculpture to fit a design brief. They investigate scale, the display environment and possibilities for viewer interaction with their piece. **Outcomes:** • Group images together, explaining their choices. • Answer questions about a chosen installation thoughtfully and generate their own questions. • Show that they understand what installation art means. • Justify their opinions of installation artworks. • Evaluate their box designs, considering how they might appear as full-sized spaces. • Suggest changes they could make if they repeated the activity to create a different atmosphere in the space. • Create an installation plan, model or space. • Describe their creations and the changes they made as they worked. • Describe how their space conveys a particular message or theme. • Make and explain their choices about materials used, arrangement of items in the space and the overall display of the installation. • Show they have considered options for how to display their installation best e.g. lighting effects. • Present information about their installation clearly in the chosen format. • Justify choices made, explaining how they improve the viewer experience or make it interactive. **Vocab:** Analyse, art medium, atmosphere, concept, culture, display, elements, evaluate, experience, features, influence, installation art, interact, interactive, location, mixed media, performance art, props, revolution, scale, scaled down, special effects, stencil, three dimensional. **Key artists:**	Investigating self-portraits by a range of artists, children use photographs of themselves as a starting point for developing their own unique self-portraits in mixed-media. **Outcomes:** • Outline a portrait drawing with words, varying the size, shape and placement of words to create interest. • Try a variety of materials and compositions for the backgrounds of their drawings. • Communicate to their partner what kind of photo portrait they want. • Show that they are making decisions about the position of a drawing on their background, trying multiple ideas. • Create a successful print. • Use some Art vocabulary to talk about and compare portraits. • Identify key facts using a website as a reference. • Explain their opinion of an artwork. • Experiment with materials and techniques when adapting their photo portraits. • Create a self-portrait that aims to represent something about them. • Show they have considered the effect created by their choice of materials and composition in their final piece. **Vocab:** Art medium, atmosphere, background, carbon paper, collage, composition, continuous line drawing, evaluate, justify, mixed media, monoprint, multi media, paint wash, portrait, printmaking, represent, research, self-portrait, texture, transfer **Key artists:**	On a journey from the Ancient Maya to modern-day street art, children explore how artists convey a message. They begin to understand how artists use imagery and symbols as well as drawing techniques like expressive mark making, tone and the dramatic light and dark effect called 'chiaroscuro'. **Outcomes:** • Collect a good range of imagery, adding annotated notes and sketches. • Make relevant comparisons between different styles of art. • Use tools effectively to explore a range of effects. • Respond to the meaning of a spirit animal through drawing. • Generate symbols that reflect their likes and dislikes with little support. • Create a tile that is full of pattern, symbols and colours that represents themselves. • Discuss ideas to create light and dark through drawing techniques. • Explain the term chiaroscuro. • Apply chiaroscuro to create light and form through a tonal drawing. • Understand the impact of using techniques for effect. • Participate in a discussion that examines the similarities and differences between different styles of art. • Form their own opinions about what art is, justifying their ideas. • Identify a cause and decide what message they want to convey. • Understand artist's choices to convey a message. • Review sketchbook and creative work to develop a drawn image. • Review and revisit ideas to develop their work. **Vocab**: Aesthetic, audience, character traits, chiaroscuro, commissioned, composition, expressive, graffiti, guerilla, imagery, impact, interpretation, mark making, Maya, Mayan,

			mural, representative, street art, symbol, symbolic, technique, tonal, tone

CYCLE B	Theme:Craft and design. - Ancient Egyptian scrolls	Theme: Drawing - I need space.	Theme: Painting and mixed media - Artist study
	Learning about the way colour, scale and pattern influenced ancient Egyptian art, children explore the technique of papermaking to create a papyrus-style scroll. Ideas are extended to create a modern response by designing a 'zine'. **Outcomes:** • Recognise and discuss the importance of Ancient Egyptian art. • Consider the suitability of a surface for drawing. Record colours, patterns and shapes through observational drawing. • Choose and use tools and materials confidently. Begin to experiment with drawing techniques. • Create a selection of sketches that show idea exploration. • Produce a final design with a clear purpose. • Follow instructions with minimal support. • Discuss and evaluate the process and outcome of their work. • Produce a complete painted or drawn piece from a design idea. • Use colours and materials appropriately, showing an understanding of effective composition. • Have a clear idea of the subject of their zine, including a range of images and information. **Vocab:** Ancient, audience, civilisation, colour, composition, convey, design, Egyptian, fold, imagery, inform, layout, material, painting, papyrus, pattern, process, scale, scroll, sculpture, shape, technique, zine. **Key artists:**	Developing ideas more independently, pupils consider the purpose of drawings as they investigate how imagery was used in the 'Space race' that began in the 1950s. They combine collage and printmaking to create a piece in their own style. **Outcomes:** • Understand and explain what retrofuturism is. Participate in discussions and offer ideas. • Evaluate images using simple responses, sometimes using formal elements to extend ideas. • Provide plausible suggestions for how a piece was created. • Comfortably use different stimuli to draw from. • Use past knowledge and experience to explore a range of drawing processes. • Select and place textures to create a collagraph plate, applying an understanding of the material, which may be supported by testing. • Create a selection of drawings and visual notes that demonstrate their ideas using sketchbooks. • Generate a clear composition idea for a final piece that shows how it will be drawn. • Apply confident skills to make an effective collagraph print. • Independently select tools and drawing techniques, with some guidance. Demonstrate growing independence, discussing ways to improve work. **Vocab:** Cold war, collagraph, collagraphy, composition, culture, decision, develop, evaluate, futuristic,imagery, printing plate, printmaking, process, propaganda, purpose, repetition, retrofuturism, revisit, space race, stimulus, technique **Key artists:**	Identifying an artist that interests them, children research the life, techniques and artistic intentions of that individual. Collecting ideas in sketchbooks, planning for a final piece and working collaboratively, they present what they have learnt about the artist. **Outcomes:** • Understand a narrative and use descriptive language to tell a story. • Suggest ideas for the meaning behind a picture. • Identify different features within a painting and use the formal elements to describe it. • Be creative and imaginative in finding their own meaning in a painting. • Use their own art or personal experiences to justify their ideas. • Read a picture well and see beyond the first glance, analysing and evaluating it successfully. • Reflect on personal experiences to convey through their own piece of abstract art. • Contribute to discussions to either the class, group or talk partner. Understand and choose a meaningful message to convey through imagery, creating some different composition ideas. • Select an appropriate artist. • Collect a range of information that is presented in an interesting and pleasing way in sketchbooks. • Generate an idea for a final piece, demonstrating some inspiration from their chosen artist. • Produce a final piece of work, selecting appropriate tools and materials to create an intended effect. • Experiment and revisit ideas, drawing on creative **Vocab:** abstract, analyse, artist, compose, compositions, convey, evaluation, inference, interpret, justify, meaning, medium, mixed media

Swarland Primary School Long Term Plan For KS2 Computing - Yr3/4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	***3.2 – Creating Media – Animation (Search the world-wide web to do with Greek topic and use animation to present findings)*** Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information ***4.3 – Creating Media (learners will develop their understanding of how digital images can be changed and edited, and how they can then be resaved and reused)*** Use search technologies effectively Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information		***3.3 – Creating Media – Desktop Publishing (Information Poster on living a healthy lifestlye)*** Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information Pupils should be taught to draft and write by: in non-narrative material, using simple organisational devices [for example, headings and subheadings] Evaluate and edit by assessing the effectiveness of their own and others' writing and suggesting improvements Proofread for spelling and punctuation errors ***3.4 – Data and Information – Branches Databases (collection pupil feedback about a chosen topic)*** Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information Use technology safely, respectfully, and responsibly		***4.5 – Programming – Repetition in Shapes (sequence for a lighthouse working on an electrical circuit)*** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs ***4.6 – Programming – Repetition in Games (create a game which uses repetition, applying stages of programming design throughout)*** Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs	

CYCLE B	***4.2 – Creating Media – Audio editing (record newspaper articles for a podcast about Egyptians)*** Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact ***4.4 – Data and information – Data logging (Science – comparing and grouping rocks based on data collected and logged)*** work with various forms of input select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information .	***3.1 – Computer Systems - Connecting Computers*** Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration. ***4.1 – Computer systems – The Internet (PSHE – Keeping safe online, using the internet in a safe way)*** Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	***3.5 – Programming – Sequencing through music (Recording and creating own sounds)*** Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs. ***3.6 – Programming – Events and Actions (Maths – geometry and directional language)*** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Swarland Primary School Long Term Plan For KS2 Computing – Yr5/6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**5.1 – Computing Systems and Networks – Sharing Information** Learners will develop their understanding of computer systems and how information is transferred between systems and devices. Learners will consider small-scale systems as well as large-scale systems. They will explain the input, output, and process aspects of a variety of different real-world systems. Learners will also take part in a collaborative online project with other class members and develop their skills in working together online. **6.1 – Computing Systems and Networks – Communication** We will learn about the World Wide Web as a communication tool. First, they will learn how we find information on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines. They will then investigate different methods of communication, before focusing on internet-based communication. Finally, they will evaluate which methods of internet communication to use for particular purposes.		**5.4 – Data – Flat-File Databases** This unit looks at how a flat-file database can be used to organise data in records. Pupils use tools within a database to order and answer questions about data. They create graphs and charts from their data to help solve problems. They use a real-life database to answer a question, and present their work to others. **6.3 – Creating Media – Web Page Creation** This unit introduces learners to the creation of websites for a chosen purpose. Learners identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process learners pay specific attention to copyright and fair use of media, the aesthetics of the site, and navigation paths.		**5.5 – Programming – Selection in Physical Computing** We will use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment. Learners will be introduced to a microcontroller (Crumble controller) and learn how to connect and program components (including output devices- LEDs and motors) through the application of their existing programming knowledge. To conclude the unit, learners design and make a working model of a fairground carousel that will incorporate their understanding of how the microcontroller and its components are connected and how selection can be used to control the operation of the model. **6.5 – Programming – Variables in Games** This unit explores the concept of variables in programming through games in Scratch. First, pupils will learn what variables are, and relate them to real-world examples of values that can be set and changed. Pupils will then use variables to create a simulation of a scoreboard. In Lessons 2, 3, and 5, which follow the Use-Modify-Create model, pupils will experiment with variables in an existing project, then modify them, then they will create their own project. In Lesson 4, pupils will focus on design. Finally, in Lesson 6, pupils will apply their knowledge of variables and design to improve their game in Scratch.	

CYCLE B	**5.2 – Creating Media – Vector Drawing** In this unit learners will find out that vector images are made up of shapes. They will learn how to use the different drawing tools and how images are created in layers. They will explore the ways in which images can be grouped and duplicated to support them in creating more complex pieces of work. This unit is planned using the Google Drawings app other alternative pieces of software are available. **6.4 – Data - Spreadsheets** This unit introduces the learners to spreadsheets. Learners are supported in organising data into columns and rows to create their own data set. They are taught the importance of formatting data to support calculations. Learners are introduced to formulas and begin to understand how these can be used to produce calculated data. They are taught how to apply formulas which include a range of cells and apply formulas to multiple cells by duplicating them. Learners use spreadsheets to plan an event and answer questions. Finally learners create graphs and charts and evaluate their results in comparison to questions asked.	**5.6 – Programming – Selection in Quizzes** Pupils develop their knowledge of selection by revisiting how conditions can be used in programs and then learning how the If… Then… Else structure can be used to select different outcomes depending on whether a condition is true or false. They represent this understanding in algorithms and then by constructing programs using the Scratch programming environment. They learn how to write programs that ask questions and use selection to control the outcomes based on the answer given. They use this knowledge to design a quiz in response to a given task and implement it as a program. To conclude the unit, learners evaluate their program by identifying: how it meets the requirements of the task; the ways they have improved it; further ways it could be improved. **6.6 – Programming – Sensing** This unit brings together elements of all the four programming constructs: sequence from year 3, repetition from year 4, selection from year 5 and variables, introduced in year 6, programming A. It offers learners the opportunity to use all of these constructs in a different, but still familiar environment whilst also utilising a physical device - the micro:bit. The unit begins with a simple program which learners build in and test in the programming environment before transferring it to their micro:bit. Learners then take on three new projects in lessons 2, 3 and 4, with each lesson adding more depth.	**5.3 – Creating Media – Video Editing** This unit gives learners the opportunity to learn how to create short videos in groups. As they progress through this unit, they will be exposed to topic-based language and develop the skills of capturing, editing, and manipulating video. Active learning is encouraged through guided questions and by working in small groups to investigate the use of devices and software. Learners are guided with step-by-step support to take their idea from conception to completion. At the teacher's discretion, the use of green screen can be incorporated into this unit. At the conclusion of the unit, learners have the opportunity to reflect on and assess their progress in creating a video. **6.2 – Creating Media – 3D Modelling** During this unit, learners will develop their knowledge and understanding of using a computer to produce 3D models. Learners will initially familiarise themselves with working in a 3D space, including combining 3D objects to make a house and examining the differences between working digitally with 2D and 3D graphics. Learners will progress to making accurate 3D models of physical objects, such as a pencil holder, which include using 3D objects as placeholders. Finally, learners will examine the need to group 3D objects, then go on to plan, develop, and evaluate their own 3D model of a photo frame.

Swarland Primary School Long Term Plan For LKS2 Science						
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**

L K S 2 C Y C L E A

STATES OF MATTER

Key Knowledge:

- Groups materials as solids, liquids or gases. Know the features (criteria) that make them different.
- Can describe, *using the particle model*, how substances change from a gas, into a liquid, then into a solid (and back again) as they are heated or cooled.
- Temperature (°C) affects the speed (rate) of evaporation.
- Describe the water cycle (evaporation and condensation).

Working Scientifically:

Explaining science

- Remember & use science words correctly.
- Use science models to describe.
- Annotate diagrams to help describe & explain.

Designing Experiments

- Predict a trend (relationship prediction).
- Plan investigations by selecting variables to change.
- Suggest a data range & interval for the cause variable.

Key Vocabulary:

Material, substance, solid, liquid, gas, flow, compressed, volume, density, state, particle, energy, movement, collision, attraction, heat, temperature (°Celcius), ice, water, water vapour, melting, boiling, freezing, condensation, evaporation, speed (rate), melting point, boiling point, water cycle, run-off, rainfall (precipitation), variable, cause, effect, prediction, comparative test, fair test, pattern, method, relationship, trend, data range, data interval.

ANIMALS INC HUMANS

Key Knowledge:

- Animals (including humans) need the right types and amounts of food (nutrition). *Unlike plants, animals can't make their own food – they need to transfer energy in through food.*
- Humans (and some other animals) have skeletons and muscles for support, protection and movement

Working Scientifically:

Explaining Science

- Remember science words I have used before
- Begin to use science models to describe
- Add science labels & information to diagrams

Data, tables and graphs

- Measure unlabelled divisions on a number line
- Use a frame to construct a simple table of results
- Use a frame to construct a bar chart

Key Vocabulary:

Nutrition, photosynthesis, energy, transfer, diet, carbohydrate (sugar), protein, fat, vitamins, minerals, fibre, balanced, unbalanced, obesity, starvation, skeleton, bones (various, humerus, ulna, radius), joint (hinge), vertebrate, invertebrate, muscles (triceps, biceps), tendon, antagonistic, pull force, push force, number line,

ANIMALS INC HUMANS

Key Knowledge:

- Know the basic functions of parts of the digestive system in humans. Digestion breaks down food into smaller and smaller bits to eventually get through the gut into the blood.
- Identify different types of teeth and describe their functions.
- Construct and interpret food chains. Identify producers (of energy), consumers (of energy), predators & prey.

Working Scientifically

Explaining science

- Remember & use science words correctly.
- Use science models to describe.
- Annotate diagrams to help describe & explain.

Making Conclusions

- Describe simple patterns, trends & relationships
- Describe trends & use science models to explain
- Suggest sensible improvements to a method

Key Vocabulary:

Nutrition, nutrients, digestion (physical / chemical), enzymes, acid, mouth, teeth, incisor, canine, pre-molar, molar, enamel, bacteria, plaque, decay, hygiene, gullet (oesophagus), stomach, small intestine, large intestine, anus, liver, gall bladder, pancreas, absorb (absorption), faeces, diet, carbohydrate, protein, fat, energy, calories, food chain, producer, consumer, predator, prey, transfer, carnivore, herbivore, omnivore, pattern, trend, relationship, conclusion, valid (validity).

LIGHT

Key Knowledge:

- We need light to see things. Dark is the absence of light.
- *There are natural and artificial sources of light energy*
- Light from the sun can be dangerous. We protect our eyes
- Light can be reflected from surfaces (*reflected light energy*)
- Shadows are formed when light is blocked by an opaque object (*shadow = absence of transmitted light energy*)
- Know how to change the size of a shadow.

Working Scientifically:

Explaining Science

- Remember science words I have used before
- Begin to use science models to describe
- Add science labels & information to diagrams

Designing Experiments

- Predict cause & effect (science prediction)
- Identify cause & effect in an investigation
- Suggest a suitable data range for the cause variable

Key Vocabulary:

Light, dark, energy, quantity, transfer, source, eye, reflected, reflection, reflective, shiny, dull, transmitted, transparent, translucent, opaque, blocked, shadow, absorbed, variable, cause, effect, prediction, fair test, method, relationship, trend, data range, data interval.

ELECTRICITY

Key Knowledge:

- Recognise common appliances that run on electricity.
- Construct a range of simple closed series circuits. Draw these circuits with correct component symbols (named).
- *Recognise and solve 'errors' in circuits to make them work.*
- A switch opens and closes a circuit.
- Conductors allow electrical (*energy*) to pass through them. Insulators do not allow electrical (*energy*) to pass through.

Working Scientifically:

Explaining science

- Remember & use science words correctly.
- Use science models to describe.
- Annotate diagrams to help describe & explain.

Making Conclusions

- I describe simple patterns, trends & relationships
- I describe trends & use science models to explain

Key Vocabulary:

Electric (electricity), source, energy, transfer, flow, closed / open circuits, series, cell, battery, positive, negative, wire, bulb, buzzer, motor, switch, clip, light, sound, conductor, insulator, metal, copper, iron, steel, non-metals, plastic, wood, glass, rubber, pattern, trend, relationship, conclusion, valid (validity).

	division, table of results, cause, effect, pictogram, block, block chart, bar, bar chart, axes, coordinate.		

L K S 2 C Y C L E B

ROCKS

Key Knowledge:

- Identify & describe different kinds of rocks using appearance and physical properties.
- *Sedimentary rock is laid down in layers in lakes, seas and deserts. Metamorphic rock is formed deep within the earth. Igneous rock is formed when volcanoes erupt.*
- *Rocks have lots of uses in our everyday lives.*
- Fossils are formed when things that have lived are trapped within rock over millions of years.
- Soils are made from rocks and organic matter.

Working Scientifically:

Explaining Science
- Remember science words I have used before
- Begin to use science models to describe
- Add science labels & information to diagrams

Classification
- Use a large spider key with obvious differences
- Create groups for sorting (create criteria)
- Combine properties required for an application

Key Vocabulary:

Rocks (e.g. sandstone, limestone, chalk, shale, coal, conglomerate, granite, slate, marble, basalt, obsidian, pumice, etc), texture, crystals, minerals, sedimentary, layers / bands, metamorphic, heat, pressure, igneous, magma, larva, fossil (body, trace, cast, mould), petrification, soil, clay, silt, sand, organic matter, key, spider key, criteria, classify (classification), sort, group, material, property, application.

FORCES & MAGNETS

Key Knowledge:

- Be able to describe a force using a *Force Arrow Model*.
- Some forces need contact (contact forces) between two objects and some forces act at a distance (non-contact forces).
- Magnets attract or repel each other. Magnets have two poles.
- Materials can be grouped together based upon whether they are attracted to a magnet (magnetic) or not.

Working Scientifically:

Explaining Science
- Remember science words I have used before
- Begin to use science models to describe
- Add science labels & information to diagrams

Designing Experiments
- Predict cause & effect (science prediction)
- Identify cause & effect in an investigation
- Suggest a suitable data range for the cause variable

Key Vocabulary:

Force, force arrow, contact force, push force, pull force, twist force, friction force, non-contact force, gravity force, movement, magnet (types), attract, repel, poles (north and south), magnetic, non-magnetic, magnetism, variable, cause,

SOUND

Key Knowledge:

- Identify how sounds are made (sound energy, vibrations)
- Sound energy/vibrations travel from a source, through a medium (solid, liquid or gas), to your ear.
- The volume of a sound is linked to the strength of vibrations (sound energy) that produces it.
- Distance away from the source affects the volume of sound.
- The pitch of a sound is linked to the frequency of vibrations (sound energy) that produces it.

Working Scientifically:

Explaining science
- Remember & use science words correctly.
- Use science models to describe.
- Annotate diagrams to help describe & explain.

Designing Experiments
- Predict a trend (relationship prediction).
- Plan investigations by selecting variables to change.
- Suggest a data range & interval for the cause variable.

Key Vocabulary:

Sound, energy, transfer, source, ear, particles, solid, liquid, gas, vibration, volume, decibels, frequency, pitch, Hertz, reflected, transmitted, absorbed, fainter / louder, lower / higher, variable, cause, effect, prediction, comparative test, fair test, pattern, method, relationship, trend, data range, data interval.

PLANTS

Key Knowledge:

- Identify & describe the functions of parts of flowering plants (roots, stem, leaves, etc) and the flower in detail.
(*Introduce conceptual link between structure & function*).
- Plants need air, light, water, nutrients from soil, and room to grow to survive and grow well.
- Water is moved within plants from the roots to the leaves through tubes called xylem vessels.
- Flowers support reproduction through pollination, seed formation and seed dispersal (link to the life cycle).

Working Scientifically:

Explaining Science
- Remember science words I have used before
- Begin to use science models to describe
- Add science labels & information to diagrams

Designing Experiments
- Predict cause & effect (science prediction)
- Identify cause & effect in an investigation
- Suggest a suitable data range for the cause variable

Key Vocabulary:

Life cycle, leaf, photosynthesis, mid-rib, leaf-veins, petiole, stem, xylem vessels, flower, bud, petal, sepal, anther, filament, stigma, pollen, style, ovary, ovule, shoot, root, tap root, lateral root, root hairs, seed, seed coat (testa), bulb, grow, radicle, plumule, cotyledon, seedling, adult, water, light, temperature, survive, reproduction, absorb (absorbed), transported, healthy, nutrients, carbon dioxide, oxygen, germinate (germination), pollen, pollination, fertilise (fertilisation),

LIVING THINGS AND THEIR HABITATS

Key Knowledge:

- Living things can be grouped in a variety of ways.
- Use classification keys to group, identify and name living things in local habitats.
- *Know how to randomly sample a habitat for species diversity (biodiversity).* Measure species richness & abundance
- Environments can change and this can pose dangers to living things. *Conservation acts to save species and restore habitats.*
Learn how to change a habitat to encourage biodiversity.

Working Scientifically:

Classification
- Use a spider key with fine differences
- Create appropriate groups for sorting (create criteria)

Data, tables and graphs
- construct a simple table to compare cause & effect
- construct a bar chart correctly
- plot coordinates (data points) on a graph

Key Vocabulary:

Habitat, environment, micro-habitat, abiotic, plants (habitat specific examples), animals (habitat specific examples), vertebrates, invertebrates, predator, prey, adapted (adaptation), competition, pollution, toxic, conservation, species, diversity, richness, abundance, biodiversity, sample (sampling), pit-fall trap, sweep net, pooter, key, spider key, number key, classify (classification), feature, table of results, cause, effect, repeats (repetition), bar chart, bar, graph, axes, data point, coordinate.

	effect, prediction, comparative test, fair test, pattern, method, relationship, trend, data range, data interval.	dispersal, variable, cause, effect, prediction, pattern, comparative test, fair test, method, relationship, trend, data range, data interval.	

Swarland Primary School Long Term Plan For UKS2 Science			
	Autumn 1	**Spring 1**	**Summer**

UK S2 CYCLE A	MATERIAL PROPERTIES	ANIMALS INCLUDING HUMANS	EVOLUTION AND INHERITANCE
	Key Knowledge: • Compare and Group materials based on their properties. Give reasons (from evidence) for uses of these materials. • A mixture is made up of 2 or more substances (particles mix). A solute (solid) dissolves in a solvent (liquid) to form a solution. • A solution and other mixtures can be separated through evaporating, filtering, sieving *and chromatography*. • Dissolving, mixing and changes in state are reversible changes • Some changes form new materials (compounds) through chemical reactions. These are irreversible reactions. **Working Scientifically:** **Explaining science** • Begin to use complex science words correctly. • Use science models to describe & begin to explain. • Begin to create & annotate own 2D/ 3D models. **Designing Experiments** • Use K&U to explain predictions • Plan investigations and ensure controlled variables are kept the same. • I design and write an ordered method (control variables) **Key Vocabulary:** Material, particle, substance, mixture, compound, state, solid, liquid, gas, melting, boiling, evaporation, condensation, freezing, energy, attraction, dissolve (dissolving), solute, solvent, soluble (solubility), insoluble, opaque, translucent, transparent (transparency), conductive (conductivity), insulating (insulation), heat, temperature, thermal, flexible (flexibility), rigid (rigidity), elastic (elasticity), absorbent (absorbency), magnetic, filtration, sieving, permeable (permeability), chromatography, chemical, physical, reaction, bond (bonded), combined, reversible, irreversible, variable, cause, effect, independent variable, dependent variable, controlled variable, data range, data interval, repetition, reliability, risk, relationship	**Key Knowledge:** • Order and compare the stages in the human life cycle. • Understand and describe the changes as humans develop to old age. • Describe the changes experienced in puberty. Understand why puberty happens. • Compare gestation time in animals. **Working Scientifically:** **Explaining science** • Begin to use complex science words correctly. • Use science models to describe & begin to explain. • Begin to create & annotate own 2D/ 3D models. **Data, tables and graphs** • Use a frame to construct a complex table of results. • Use a frame to construct a graph and scale axis with help. • Join plotted coordinates with straight lines. **Key Vocabulary:** Offspring, baby, toddler, child, adolescent, adult, geriatric, growth, puberty, fertilisation, gestation, birth, egg, sperm, gamete, embryo, foetus, periods, pubic hair, testicle, penis, vagina, uterus, womb, ovary, breasts, erection, intercourse, ejaculation, metamorphosis, table of results, cause, effect, repeats, bar chart, coordinate, graph, data point, scale, plot, mean, trend line.	**Key Knowledge:** • Living things can produce identical offspring (*asexual*) *but sexual reproduction results in* offspring that, *although share inherited features*, may vary (not identical) from their parents. Know some inherited features • *This variation means that some individuals will have features better suited to a changing environment. These better features will be selected for by nature, and so, individuals that have them are more likely to survive.* • *Natural selection* is the process *where* species adapt to their environment. It is the engine that drives evolution. Know how some species are adapted • Fossil evidence shows how living things have changed over time **Working Scientifically:** **Explaining science** • Use complex science words correctly (growing fluency). • Use science models to describe and explain • Create & annotate 2D/3D diagrams **Data, tables and graphs** • Construct a complex table of results. • Construct a graph and scale at least 1 of the axes independently. • Plot mean value coordinates and draw a trend line **Key Vocabulary:** Inherit (inheritance), variation, asexual, sexual, reproduction, sperm, egg, cell, nucleus, gene, characteristic, feature, trait, environment, parent, offspring, selection (selected), adapt (adaptation), species, evolution, fossil, extinct (extinction), survival, table of results, cause, effect, repeats, bar chart, bar, coordinate, graph, data point, extrapolate, scale, plot, mean, trend line, linear, non-linear.

UK S2 CYCLE A	Autumn 2	Spring 2	
	ANIMALS INCLUDING HUMANS **Key Knowledge:** • Name the main parts of the human circulatory system. Describe the functions of the heart (structure), blood vessels (artery, vein & capillaries) & blood (components) • *Understand & describe the double circulatory system of humans (Big-Picture Model – using the parts above)* to describe the way water, nutrients & *oxygen* are transported in animals • Know the impact of diet, exercise, drugs & lifestyle on the way our bodies function **Working Scientifically:** **Explaining science** Use complex science words correctly (growing fluency). Use science models to describe and explain Create & annotate 2D/3D diagrams **Designing Experiments** Reason K&U to make a hypothesis (relationship) Plan reliable investigations (use variable terminology) I collect repeated readings (>3) & calculate the mean **Key Vocabulary:** Circulation (circulatory), heart, atrium (atria), ventricle (ventricles), valve, vessel, artery, vein, capillary, blood, red blood cell, white blood cell, platelets, plasma, lungs, oxygen, oxygenated, deoxygenated, carbon dioxide, nutrients, obesity, exchange, exercise, pulse, recovery time, drugs (various), variable, cause, effect, independent variable, dependent variable, controlled variable, data range, data interval, repetition, reliability, risk, relationship prediction, hypothesis, method, precision, error.	**LIVING THINGS AND THEIR HABITATS** **Key Knowledge:** • Describe the similarity and differences in the life cycles of mammals, amphibians, birds and insects. Compare & contrast. • *Research life cycles of plants, invertebrates & vertebrates within local habitats. Be able identify & describe changes over time.* • Describe the life process of reproduction in plants & animals. ▪ Sexual – fertilisation leading to variation ▪ Asexual – vegetative growth leading to clones **Working Scientifically:** **Explaining science** • Begin to use complex science words correctly. • Use science models to describe & begin to explain. • Begin to create & annotate own 2D/ 3D models. **Designing Experiments** • Use K&U to explain predictions • Plan investigations and ensure controlled variables are kept the same. • I design and write an ordered method (control variables) **Key Vocabulary:** Sexual, asexual, growth, metamorphosis, puberty, reproduction, fertilisation (internal / external), gamete, egg, sperm, embryo, foetus, larva, pupa (chrysalis), testes, uterus, gestation, birth, petals, sepals, carpel, stigma, ovary, anther, stamen, pollen, pollination, dispersal, vegetative, bulb, runner, tuber, rhizome, corm, stem, root, variation, clone, independent variable, dependent variable, controlled variable, data range, data interval, repetition, reliability, risk, relationship prediction, hypothesis, method, scale.	
	Autumn 1	**Spring 1**	**Summer**

UK S2 CYCLE B

FORCES

Key Knowledge:

- *Opposing forces can be in balance or unbalanced.*
- Unsupported objects fall towards earth because of gravity force acting between earth and the falling object.
- Air resistance force (gas) water resistance force (liquid) and friction force (solid) act between moving surfaces *(Ideas about weight and acceleration due to gravity force could be described but should be left to KS3).*
- Levers, pulleys and gears allow a smaller force to have a greater effect (force multipliers).

Working Scientifically:

Explaining science

- Begin to use complex science words correctly.
- Use science models to describe & begin to explain.
- Begin to create & annotate own 2D/ 3D models.

Data, tables and graphs

- Use a frame to construct a complex table of results.
- Use a frame to construct a graph and scale axis with help.
- Join plotted coordinates with straight lines.

Key Vocabulary:

Force, force arrow, contact force, non-contact force, push force, pull force, twist force, friction force, upthrust force, reaction force, gravity force, air resistance force, water resistance force, particle, solid, liquid, gas, balanced, unbalanced, resultant force, force meter, Newton (N), mass, weight, machine, lever (type 1,2 & 3), pivot, fulcrum, effort, load, pulley, mechanical advantage, force multiplier, gear, cog, turning force, speed, acceleration, table of results, cause, effect, repeats, bar chart, bar, coordinate, graph, data point, extrapolate, scale, plot, mean, trend line.

EARTH AND SPACE

Key Knowledge:

- The sun, planets and moon(s) are spherical bodies.
- Can describe the development of a heliocentric model of the solar system. The Earth & other planets orbit the sun in the Solar System.
- Know the order of planets in our solar system. Can describe how planets rotate (day/night) and orbit the sun (seasons). *Big Picture.*
- Day and night are caused by the Earth's rotation (sun appears to move across the sky).
- The moon orbits the Earth. *Know the phases of the moon.*

Working Scientifically:

Explaining science

- Begin to use complex science words correctly.
- Use science models to describe & begin to explain.
- Begin to create & annotate own 2D/ 3D models.

Making Conclusions

- Describe patterns, trends & relationships
- Use data in conclusions & science models to explain.

Key Vocabulary:

Solar system, sun, star, planet, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, Asteroids, moon, orbit, ellipses, gravity force, temperature, solid, liquid, gas, axis, tilted axis, day, night, month, year, satellite, atmosphere, surface, new moon, full moon, quarter moon, waxing, waning, crescent, gibbous, energy, transfer, Universe, telescope, astronomy, heliocentric, pattern, data, primary data, secondary data, trend, relationship, conclusion, valid (validity)

LIVING THINGS & THEIR HABITATS

Key Knowledge:

- Living things are classified into broad groups according to observable features (*binomial naming system*). Reasons for classifying.
- *There are five Kingdoms of living things. Know the binomial naming System. Can use & construct classification Keys.*
- *Know how to sample a habitat for species diversity (biodiversity). Measure species richness, abundance & evenness. Measure abiotic factors over time. Manage/plan change to encourage biodiversity.*
- Micro-organisms include bacteria and fungi.

Working Scientifically:

Classification

- construct spider and number keys
- Group and sub-group by fine observation

Designing Experiments

- Reason K&U to make a hypothesis (relationship)
- Plan reliable investigations (use variable terminology)
- Plan to minimise risk & describe safe use

Key Vocabulary:

Classification, taxonomy, characteristic, diversity, variation, Kingdom, phylum, class, order, family, genus, species, binomial, animal, plant, fungi, Protista (single-celled), Monera (bacteria), virus, vertebrate, invertebrate, agar, sort, group, re-group, classify, criteria, spider key, number key, variable, cause, effect, independent variable, dependent variable, controlled variable, data range, data interval, repetition, reliable, risk, relationship prediction, hypothesis, method, precision, error.

	Autumn 2	Spring 2	

UK S2 CYCLE B	**ELECTRICITY** **Key Knowledge:** • Confidently draw a range of series circuits using symbols. • Link the brightness of a bulb / volume of a buzzer to the number & Voltage of cells used in the battery. *Measure Voltage.* • Explain changes in brightness / volume *using the Energy Transfer Model* (link to Voltage). Explain the action of a switch. • *Begin to explain component 'failure' by resistance to electrical flow (energy transfer out of the circuit as heat energy). Begin to describe electrical flow as Current.* **Working Scientifically:** **Explaining science** • Use complex science words correctly (growing fluency). • Use science models to describe and explain • Create & annotate 2D/3D diagrams **Designing Experiments** • Reason K&U to make a hypothesis (relationship) • Plan reliable investigations (use variable terminology) • Plan to minimise risk & describe safe use **Key Vocabulary:** Electric (electricity), source, energy, transfer, Voltage, flow, Current, resistance, insulator, conductor, closed / open circuits, series, cell, battery, positive, negative, wire, bulb, buzzer, motor, switch, clip, metal, light energy, sound energy, heat energy, kinetic energy, Voltmeter, variable, cause, effect, independent variable, dependent variable, controlled variable, data range, data interval, repetition, reliability, risk, relationship prediction, hypothesis, method, precision, error	**LIGHT** **Key Knowledge:** • Light travels in straight lines from a light source *(Energy Transfer Model) directly, reflects, goes through a material or is absorbed.* • Light travels in straight lines from a light source directly into the eye (*represent this using a light ray diagram*) • Light travels in straight lines from a light source to an object and reflected into the eye (*represent using a light ray diagram*) • *Know the angle of incidence is equal to the angle of reflection.* • Explain the size and shape of a shadow knowing that light travels in straight lines (*represent using a light ray diagram*) **Working Scientifically:** **Explaining science** • Use complex science words correctly (growing fluency). • Use science models to describe and explain • Create & annotate 2D/3D diagrams **Making Conclusions** • Describe changing patterns, trends & relationships • Use primary and secondary data in my conclusions • Suggest limitations (data) & practical improvements **Key Vocabulary:** Light, source, energy, transfer, reflection (reflected), transmits (transmitted), absorbs (absorbed), shiny, dull, mirror, transparent, translucent, opaque, ray, eye, receptor, shadow, angle, incidence, perpendicular, pattern, data, primary data, secondary data, trend, relationship, conclusion, valid (validity), limitation.	

	.		

Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

A	Connected History- Iron Age *Through this enquiry pupils first identify the common features of hill forts and then investigate their likely function, not only as a defensive structure but also as a trading, meeting and ceremonial place. The Iron Age was the most violent period of prehistory in Britain, and another important focus of this enquiry is to support pupils to reflect on why this was the case*	Connected Geography- How can we live more sustainably? *The main objective of this enquiry, therefore, is for the pupils to understand through the use of a number of examples what sustainability entails and how they might approach applying those principles to their own lives. It is important for young geographers to grasp that sustainability is not just confined to how we interact with the environment. It also has equal relevance to many aspects of their life, especially in the context of personal and social wellbeing.* *This groundwork is also important from the perspective of establishing continuity and progression through the curriculum – in Upper Key Stage 2 the concept of sustainability will be central to the pupil's investigation of the causes and implications of climate change.*	Connected History- Bronze Age *This investigation allows pupils to understand some of the key changes that occurred in Britain towards the end of the Neolithic period of the Stone Age and the progress these brought about in society. The enquiry also enables pupils to reflect upon the reasons why Bronze Age people may have constructed the large number of stone monuments that still exist in many parts of the country.*	Connected Geography- Tornedos *The names and location of the countries of North and Central America.* *The difference between physical and human hazards.* *Why tornadoes are such a serous natural hazard.* *Where tornadoes happen most often in the United States.* *How tornadoes form.* *Why the state of Oklahoma is particularly at risk from tornadoes.* *How modern tornado shelters compare with those in the past.* *How underground garage tornado shelters help to protect people.* *What people are advised to store in tornado shelters.* *What items it is best to put in an emergency kit to use after a tornado.* *The causes and effects of some of the other major physical and*	Connected History- Vikings *This investigation assists pupils to distinguish historical facts from myth, folklore and legend in relation to the people commonly referred to today as 'the Vikings', but who never shared or would have recognised that collective identity*	Connected Geography- Water *During the enquiry pupils will:* *Describe the causes and symptoms of cholera and explain why this very infectious disease caused thousands of deaths during epidemics in cities such as Birmingham in Victorian times;* *Describe the features and purpose of a reservoir and explain why the reservoirs needed to supply Birmingham with fresh water were built in the mountains of central Wales;* *Use maps and photographs to compare and contrast the landscape of part of central Wales in 1908 with that of today and identify, describe, observe and explain the changes which have occurred;* *Analyse a modern Ordnance Survey map of part of central Wales to identify, describe, observe and explain a range of physical and human features of the area;* *Identify and describe the different ways in which water*

				human hazards that affect the United States.		*is used in the home and be able to explain with examples how people use 'virtual' water without knowing;* *Identify and explain why some countries consume much greater quantities of water than others;* -Jane's house (Erosion and Coasts) *Pupils master through learning about how a number of different natural and human forces impact on the landscape, the concepts of environmental interaction and erosion, and then to apply their knowledge and understanding of these concepts to an investigation of the causes and effects of the disintegration of a coastline in the United Kingdom along which people are living.*

B	Connected History- Stone Age *The primary aim of the investigation is for pupils to understand that, although the lives of early humans in Britain remained much the same for long periods of time during the Stone Age, this period was also marked by perhaps the greatest change ever to occur in British society – that of the creation of permanent farming-based settlements and the birth of agriculture and the gradual decline of a hand-to-mouth subsistence existence. In addition, this investigation also supports pupils to appreciate that, without written evidence of how people lived in the Stone Age, so much of what archaeologists think occurred is little more than supposition based on the subjective interpretation of artefacts.*	Connected Geography- Why are Jungles so wet and deserts so dry? *In terms of continuity and progression this enquiry builds on and extends the pupils' understanding of the concept of weather, which was introduced and investigated at* *Key Stage 1. It lays a firm foundation of understanding to enable them to consider the challenges of climate change later through the Upper Key Stage 2 programme. Throughout the enquiry, pupils are encouraged to reflect upon how climate has such an important influence upon landscapes, plants, animals and human activity on Earth – they investigate this relationship at a number of scales. Pupils apply a wide range of geographical and computer skills throughout the enquiry to enable them to better understand the relationship between climate and living things and also to introduce them to the concept of biomes. Towards the end of the enquiry the pupils are able to develop*	Connected History- Romans *First, the concept of invasion is explored. For the first time in British history a foreign power, with an already extensive European and African empire, planned and executed a very expensive and ultimately successful invasion. Why? What was it about Britain at this time that the Romans wanted? Why go to all that effort and expense? In progressing their thinking, pupils come to understand that what the Romans really wanted were natural resources and further living space to exploit. This conceptual understanding is crucial to comprehending why countries have invaded and occupied other nations ever since, as illustrated later by both the Anglo-Saxon and Viking invasions of Britain.* *Second, pupils are invited to explore why at one point in their occupation the Romans were only one battle away from being forced to retreat from*	Connected Geography- Beyond the Magic Kingdom (Comparison of UK and Florida) *This enquiry is designed to enable pupils to gain an understanding of the physical and human geographical features of a region in North America with which they can begin to compare and contrast the characteristics of a region of the United Kingdom. It begins by focusing on aspects of leisure and tourism with which pupils may be familiar both in the United Kingdom and overseas. Some may even have direct experience of visiting Florida and the Magic Kingdom. The objective of the investigation is to take the pupils beyond that with which they may be familiar and introduce them to different aspects of Florida's physical and human geography.*	Connected History- Anglo Saxons *Initially the pupils examine the evidence as to why the Romans withdrew from Britain in the fifth century, and in particular the growing aggression of Barbarian tribes in Europe which culminated in the Sack of Rome in ad 410.* *Pupils then explore who the so-called Anglo-Saxons were, from where they originated and why their invasion and settlement was a relatively straightforward affair. Being mostly farmers (and therefore used to rural rather than urban living) meant that the Anglo-Saxons laid down the pattern of farmsteads, hamlets and villages that still exists in the countryside of many parts of Britain. Pupils explore the evidence that suggests what their homes might have been like as well as the structure of the villages in which they lived*	Connected Geography- Why do some Earthquakes cause more damage? *This enquiry introduces pupils to some key aspects of physical geography, in particular one of the major outcomes of tectonic activity in the world – earthquakes. Some work is also focused on volcanic activity, which is developed at greater depth at Upper Key Stage 2.* *As they progress through the ancillary questions pupils come to understand why it is that earthquakes only tend to occur in particular areas of the world as a consequence of the pattern and movement of the tectonic plates of the Earth's crust. The pupils initially investigate the causes and impact of one specific recent earthquake in one particular location in the world, where earthquakes occur frequently, before looking more widely at global patterns. At all points the people–environment relationship, which is the subject paradigm of geography, is maintained through the enquiries as pupils seek to understand the*

		their understanding of how climate is the main factor determining the distribution of biomes on Earth through the study of two biomes in depth.	*Britain. Here they are introduced to the historical heroine that is Boudica. Having entered into a peaceful agreement with Boudica and the Iceni tribe, what was it that the Romans did that led to such an uprising that destroyed three of the most important Roman towns in Britain? As well as this, pupils have an opportunity to reflect on another significant historical concept – that of historical evidence compared with legend or folklore. When it comes to Boudica, where does the truth lie?*			*interaction of people and earthquakes.* *The pupils are supported to develop and apply high-order thinking to a consideration of why some earthquakes of the largest magnitudes do not always cause as much death and destruction as earthquakes of lesser magnitude. Here, the centrality of the human condition in terms of quality of life in particular and also technological development is an important area for the pupils to begin to understand.* -Why do so many people live in megacities? *This investigation supports pupils to develop their understanding of the important geographical concepts of settlement and urbanisation through the study of the world's megacities (cities with a population of over 10 million). This is very important because globally over half of the world's population now live in towns and cities – in the United Kingdom this figure has reached 80 per cent.*

						During the lifetime of the pupils urban populations will continue to grow very rapidly around the world and particularly amongst the poorest countries as they develop economically. Through the ancillary enquiries pupils are able to explore some of the economic and social reasons why the population of cities increase. They also compare and contrast the benefits and problems that can arise in urban areas as a result of housing people at such high densities. Through their enquiries pupils are able to apply, in relevant contexts, a wide range of geographical skills; and as is appropriate to Lower Key Stage 2, the emphasis is on supporting them to explain things through the synthesis of information from different sources.

Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

A	Connected History- Richard 3rd *(Monarchy)* *King Richard III was the last monarch of the Royal House of Plantagenet.* *The order in which Plantagenet kings ruled England.* *Why 1483 was a momentous year for the Plantagenet dynasty. Why Richard Plantagenet was made Lord Protector of the new King Edward V.* *Why Richard then proclaimed himself King Richard III.* *That Richard moved Edward and his brother into the Tower of London. Why what happened to King Edward and Prince Richard in 1483 remains an unsolved mystery.* *There are five theories supported by primary evidence as to what might have happened to the boys. The two sides that fought the Battle of Bosworth in 1485.* *The two main reasons why King Richard III lost the battle.*	Connected Geography- Why are mountains so important? *This enquiry introduces pupils to the physical and human importance of a biome that covers one-fifth of the world's land surface. The study of mountains enables pupils to comprehend key concepts of physical geography such as plate tectonics and the formation of different rock types, as well as erosion and geological deep time. The interaction of people with mountains at a range of scales and locations illustrates the central paradigm of the discipline of geography – its focus on understanding the patterns and processes involved in the interrelationship of humans with the environments that surround them.*	Connected History- Trojan Horse *This investigation invites the learner to explore the causes and consequences of this 10-year war and in particular to evaluate the conflicting evidence relating to the famous story of the so-called Trojan Horse, which has been passed down through the generations. Did the Trojan War really end with the defenders of Troy being duped into both accepting a huge hollow horse and then wheeling it back into what until then had been an impregnable fortress? And without checking inside it first! As the enquiry unfolds, the pupils are supported to interrogate and reflect upon the nature of the evidence (written, visual depictions and archaeological) that exists to corroborate the story. They are also guided towards considering alternative viewpoints that have been formulated by modern-day historians and archaeologists. Ultimately, like so much history, the outcome for each pupil is a personal judgement call as*	Connected Geography- What is a river? *The objective of this investigation is to enable pupils to understand the features and processes of a common and very significant feature of physical geography with which they will be familiar. The enquiry begins by establishing the key concept that rivers change over their course from source to mouth and develop distinctive physical features as they do so by altering the environment through erosion and deposition. Pupils are supported to apply a wide range of geographical skills that draw upon map work, satellite imagery and GIS resources to consolidate their understanding. Time is also devoted to exploring rivers, in particular their estuaries as important ecosystems and habitats for a wide range of living things. They are then introduced to examples of the many ways in which humans interact with rivers and exploit them economically as a resource, especially as ports for trade. Pupils are also given an opportunity to reflect upon how rivers can invoke emotional and artistic*	Connected History- British Empire *This investigation supports pupils to understand arguably the most influential and far-reaching dimension of British history post-1066 – that of the establishment, expansion and ultimate decline of the largest empire the world has ever seen. Finally, pupils study what remains of the British Empire – in the form of the 14 British Overseas Territories located around the world – along with the responsibilities Britain still has to these nations.*	Connected Geography- How is climate change affecting our lives? *The challenge of changing patterns of weather that contribute to longer-term climate change trends across the globe, will undoubtedly be one of the greatest issues to confront primary school pupils during the remainder of the century. This enquiry gives pupils an insight into how changing patterns of weather at different locations around the world are impacting on the lives of real people with whom they can relate. Through the experiences of these individuals and communities, pupils are able to reflect upon how changes to normal and usual weather conditions can have to serious implications for these people*

	The three reasons why the result of the battle was so important in English history.		*to whether there is sufficient evidence to ascribe the status of historical fact to the story, or whether an alternative label – 'legend' or 'myth' – is more appropriate*.	*responses in people such as composers and painters who seek to evoke and portray the sounds and images of rivers for others to appreciate.*		

B	Connected History- Ancient Egypt -Maya (Ancient Civilisations) *Pupils are introduced to the great achievements of Maya society, including how they used hieroglyphs to communicate in 'picture writing', developed a sophisticated numerical system to calculate and solve complex problems and how they developed an expert awareness and understanding of the make-up and movement of the constellations of the night sky. Throughout the enquiry, the emphasis is on pupils understanding not just what historians know about the ancient Maya, but, equally important, how they have come to know it. Consequently, pupils are challenged to analyse a range of primary and secondary sources of information about the ancient Maya and to reach their own conclusions and judgments regarding their relative significance*	Connected Geography- National Parks *Pupils identify the location and distribution of the 15 National Parks in the United Kingdom and understanding the rationale that underpins them – to protect and conserve the country's most scenic and beautiful landscapes, important wildlife and associated cultural heritage, to actively encourage visits and interaction with people and to ensure, in the long term, the sustainability of the 440 000 people who live and work within them. This involves grappling with some very important concepts such as 'heritage', 'environment', 'value' and 'economic activity' through a range of accessible and engaging activities.* Why is Fair Trade fair? *This enquiry enables pupils to understand what*	Connected History- Battle of Britain *This investigation enables pupils to examine a wide range of historical sources to help them gain some insight into the thinking of the leaders of Nazi Germany in May 1940 and the reasons why securing air superiority was so critical to them for any invasion plan to succeed. It also supports pupils to identify and reach a judgement about the relative importance of the factors that contributed to the United Kingdom winning what has become known as the Battle of Britain*	Connected Geography- How do Volcanoes affect the lives of people on Heinmany? *This enquiry encourages and supports pupils not only to understand some of the key physical* *processes that shape the Earth, but also to recognise and evaluate the interaction of people* *with these physical processes – the very essence of geography. All landscapes and* *environments offer opportunities, constraints and, sometimes, risks and hazards to the people* *who coexist with them. This enquiry exemplifies this in a manner that is straightforward for* *pupils to grasp and to evaluate. As the enquiry evolves, so pupils are able to appreciate how* *environments may change over time and how this might bring advantages and challenges to*	Connected History- York *The first enquiry focuses on the Roman occupation of York and in particular the legacy and internal family feuding of one emperor, known as the 'African Emperor', who lived in and ruled the entire Roman Empire from York for a few years at the beginning of the third century. On his death, the Roman Empire was co-ruled for a while by his two sons – Antoninus (commonly known as Caracalla) and Geta. Following the assassination of Geta by his brother, all records of his sibling, including his image, were expunged, by order of Caracalla. Can pupils recreate his picture from the many shards of broken head pots discovered at York?* *The second investigation presents pupils with an Anglo-Saxon mystery to solve from the seventh century. The discovery at Coppergate in the 1980s of the magnificent 'York helmet', which archaeologists believe to have belonged to a Northumbrian nobleman called Oshere, has raised many intriguing questions. In*	Connected Geography- Ocean Plastic *During the enquiry pupils will:* *Describe what an oceanographer is and be able to identify and locate the five major oceans of the world together with the world's largest expanses of sea and explain the difference between the two;* *Describe and explain what happened to the cargo of plastic ducks lost from a ship in the middle of the Pacific Ocean in 1992 and identify, locate and observe accurately on a world map the places around the world where they have washed up in the intervening years – offer reasons and judgements for the pattern observed;* *Demonstrate understanding through comprehension, recall and explanation of what ocean gyres are and how their action helps to create areas of waste accumulation known as ocean garbage patches;* *Evaluate the advantages and disadvantages of plastic as an incredibly versatile and widely*

		international trade entails – the manufacture, selling and buying of goods and services between countries through exports and imports – and the fact that trade has been operating for thousands of years. The Silk Road, which remains the world's most enduring trade route between China and Europe, demonstrates to pupils the key concept of trade – producing commodities that other people around the world don't have and are prepared to pay to obtain		*the people who are interconnected with them.*	*particular, it appears that the helmet was carefully hidden by Oshere in a manner that would suggest he was almost certainly going to return for it. But the fact that he didn't presents a mystery for pupils to try to solve from the limited evidence available.*	*used material and compare and contrast these with the negative environmental impact that they can have;* *Describe the main uses of single-use plastic in everyday life and identify and evaluate the potential benefits of more sustainable alternatives;* *Carry out a simulated survey of a beach using sampling techniques to estimate the number of microplastics present describing, explaining and evaluating the validity and trustworthiness of their methods and results.*