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
KS2	**CYCLE A**	H8To learn about change including transitions between key stages, loss, separation, divorce and bereavement. H13/14 To recognise how their increasing independence brings increased responsibility to keep themselves and others safe. R2/3/4 To recognise what constitutes a positive, healthy relationship and develop the skills to form and maintain positive healthy relationships. R2/3/4/5/6/19/20 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. Strategies for keeping physically and emotionally safe including road safety. H9, 10-11, H21 Bikeability level 1 – Safety in the environment		L11 To appreciate the range of national, regional, religious and ethnic identities in the United Kingdom. L9/10To know what being part of a community means and about varied institutions that support communities locally and nationally. H5 To reflect and celebrate their achievements, identify strengths and areas for improvement, set high aspirations and goals. L13, 14, 15, 16To develop an initial understanding of 'interest', 'loan', 'debt' and 'tax' and their contribution to society.		H23, R10, R12 To listen and respond respectfully to a wide range of people, to feel confident to raise their own concerns, to recognise and care about other people's feelings and to try to see, respect and if necessary constructively challenge others' points of view.	
KS2	**CYCLE B**	H23, 20, 15 School rules about health and safety, basic emergency aid procedures, where and how to get help. L3/4 To understand that there are basic human rights shared by all peoples and all societies and that all children have their own special rights set out in the United Nations Declaration of the Rights of the Child. That these universal rights are there to protect everyone and have primacy both over national law and family and community practices.		R8 To judge what kind of physical contact is acceptable and unacceptable and how to respond. R1 To learn that their actions affect themselves and others. L9/10To know how pressure to behave in unacceptable, unhealthy or risky ways can come from a variety of sources, including people they know. R12 To develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves ow and the media.		H9/10/11 recognise, predict and assess risks in different situations and decide how to manage them responsibly and to use this as an opportunity to build resilience.	

KS2 **CYCLE C**	R2/4 To recognise different types of relationships inc those between friends, relatives, family and acquaintances. R5/19 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. R3 H23 To recognise ways in which a relationship can be unhealthy and whom to talk to if they need support. H22/25 Further develop strategies for keeping physically and emotionally safe including road safety. H21 Bikeability level 2.	L13, 14, 15, 16To develop an initial understanding of 'interest', 'loan', 'debt' and 'tax' and their contribution to society. L17, 18 To explore and critique how the media represent information. L17,18 To critically examine what is presented to them in social media and why it is important to do so. Understand how information contained in social media can misrepresent or mislead; the importance of being careful what they forward to others.	L13, 14, 15, 16 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. L16 What is meant by enterprise and begin to develop enterprise skills.	
KS2 **CYCLE D**	L1 To research, discuss and debate topical issues, problems and events that are of concern to them and offer their recommendations to appropriate people. H24 The responsible use of mobile phones, safe keeping, safe user habits.	L11, 12 To know that differences and similarities between people arise from a number of factors, including family, cultural, ethnic, racial and religious diversity, age, sex, gender identity, sexual orientation and disability. 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.	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.	

Swarland Primary School Long Term Plan For Religious Education Cycle

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
KS2	CYCLE A	What is God like & how does believing in God influence people's lives? (Greek/Roman)	How and why do religious people celebrate festivals? (Diwali) Why is Christmas called Festivals Of Light?	Who was Guru Nanak& what stories are told about him? What are the 5K's and what do they mean?	What are the stations of the cross and why are they in many churches?	How do we decide what is right & wrong? What do Christians say is right & wrong? (10 commandments/ British values)	Cultural topic
KS2	CYCLE B	How do creation religious stories compare and contrast?	How and why should we care for the natural word? What special foods are eaten at Christmas and why?	What is the difference between different denominations of Islam – sunni, shia, sufi?	What is a mosque and how is it used? What happened to Jesus during Holy week?	What does it mean to be a Hindu? (home & shrines)	Cultural topic.
KS2	CYCLE C	What is harvest and how is it celebrated in different parts of the world?	What is the Epiphany and why is it important to Christians? (Non Jewish magi – universal religion/significance)	Who was Moses and what stories are told about him? What is the Passover & why do Jewish people celebrate it?	What is lent and what do Christians do during lent and why?	What are the K's?	Cultural topic.
KS2	CYCLE D	Identify 2/3 world or local problems and suggest ways to solve the problem.	What is the meaning behind some of the advent traditions? (Christingle).	What miracles did Jesus do when he was alive? Do miracles happen today?	What does the resurrection of Jesus mean?	Reflecting on your own life, thinking about the religions you have studied, what are the best rules to live by and why? British values.	Cultural topic.

Swarland Primary School Long Term Plan For 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
Autumn	Place value	Place Value	Place Value	Place Value	Addition & Subtraction	Addition & Subtraction	Addition & Subtraction	Addition & Subtraction	Measures Length Perimeter	Measures Length Perimeter	Multiplication & Division	Multiplication & Division
Spring	Multiplication & Division	Multiplication & Division	Multiplication & Division	Multiplication & Division	Shape	Shape	Shape	Fractions & Decimals	Fractions & Decimals	Fractions & Decimals	Fractions & Decimals	Fractions & Decimals
Summer	Time	Time	Time	Volume & Capacity	Volume & Capacity	Statistics	Statistics	Addition & Subtraction	Addition & Subtraction	Multiplication & Division	Fractions & Decimals	Fractions & Decimals

Swarland Primary School Long Term Plan For KS2 Music

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**Theme: Greeks** • Control their voice when singing. • Play clear notes on instruments • To develop the confidence to perform in front of others • Sing songs as a group, keeping in time • Sing in tune with expression • Play clear notes on instruments		**Theme: Healthy Living/World War** • Know that phrases are where we breathe in a song • Use different elements in their composition • Create repeated patterns with different instruments • To clap and play a range of simple rhythms from notation • Understand how the use of tempo can provide musical contrast within a piece of music		**Theme: The Sea** • 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 • Recognise their work explaining how it was improved • Identify repetition contrasts and variations	
CYCLE B	**Theme: Egyptians** • Sing confidently as a group in tune • Sustain a chord or repeating note to a song • Improvise using repeated pattern • Use selected pitches simultaneously to produce simple harmony		**Theme: Romans** • Follow traditional notation for simple rhythms • Use letter names when memorizing simple melodic patterns • Use notation in performance • Show how they can use dynamics to provide contrast		**Theme: Anglo Saxons** • Identify the character of a piece of music • Compare different kinds of genre • Explain the place of silence and what effect it has • Identify how a change in timbre can change the effect of a piece of music	
CYCLE C	**Theme: Digging Up The Past** • . Sing confidently and expressively in a group • Breathe in the correct place when singing • Recognise and use basic structural forms e.g rounds, variations, rondo form • Revise and play repeated sequence of pitches to produce simple harmony		**Theme: Voyages** • Choose the most appropriate tempo for the music • Compose music to meet specific criteria using dynamics, structure, melody rhythm • Evaluate music by using appropriate vocabulary • Understand use of syncopation and pulse		**Theme: Aztecs** • Contrast the work of famous composers and show preferences • Suggest improvements to their own work • Listen to layers of sound and how they create effect • Identify use of dynamics to shape the character of the music. • Understand use of tempo and how this can shape a phrase in music	
CYCLE D	**Theme: Tudor Times** • Evaluate work and suggest improvements • Compose music for a range of purposes using chords, rhythm, dynamics, timbre and structure • Perform using notation • Lead on performance and perform from memory • Harmonise accurately following a part • Understand and perform two distinct melodic or rhythmic parts and understand how they fit together		**Theme: Dark Skies** • Understand elements of traditional musical notation e.g time signature, flats, sharps, bars • Follow a simple tune from traditional notation • Recognise different forms of notation e.g clefs etc. • Compose music for a range of purposes using structure, dynamics, melody, rhythm and chords		**Theme: Vikings and Invaders** • Analyse features within the music. • Evaluate and improve on their work • Understand the contrast of the impact of different composers on music • Appraise compositions they have created	

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 **Extraordinary 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 KS2 English

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**Theme: Greeks** Who were the Greeks? Researching the Greeks, non-fiction writing. Life as a Greek person/God or goddess. Story writing, mythical writing. Reading and analysing myths and legends. Explore fact and fiction.		**Theme: Healthy Living/World War** How to keep our body healthy through exercise and food reports. Labelling, explanations, and non-fictional writing, leaflets. How we can contribute to a healthy lifestyle. Poetry, alliteration, shape poems, acrostics, descriptive writing.		**Theme: The Sea** Understanding why Grace Darling was a hero. Report writing, diary writing, adventure stories, role play and drama and explanations. The story of the titanic. Report/story writing, poetry, diary writing, and persuasive writing.	
CYCLE B	**Theme: Egyptians** The main features of regional and local newspapers. Writing and publishing newspaper reports. Focus on importance of drafting and editing. Labelling, report writing, researching, descriptive writing. Alliteration for newspaper headlines. Christmas poetry, Christmas story boards of the Christmas story. Story of Babushka.		**Theme: Romans** Understanding the life of a Roman. Role play, report writing, non-fictions writing, story board of Boudicca, imaginative story writing, diary writing. Role play, report writing, non-fictions writing, story board of Boudicca, imaginative story writing, diary writing.		**Theme: Anglo Saxons** Imaginative, fantasy writing, looking into different authors and styles of stories, book reviews. Play scripts re-enacting plays using scripts, filming dramas. Imaginative, fantasy writing, looking into different authors and styles of stories, book reviews.	
CYCLE C	**Theme: Digging Up The Past** Understanding what was life like in prehistoric times – from stone age to iron age. This will be done in a child friendly way through the flint stones, the croods and the ice age (but based on fact) Opportunities for non-fiction writing. Focus texts: Cave baby – Julia Donaldson Stig of the dump – Clive King Stone age boy – Satoshi Kitamura Through use of these texts we will concentrate on story plots, characters and settings. Trip to the Hancock Museum – cross curricular links.		**Theme: Voyages** Focus texts: Voyages of survival – Arabian Tales (Aladdin, Sinbad, Ali Baba and the forty thieves) Goodnight Mr Tom. Christopher Columbus Quentin Blake's the Seven Voyages of Sinbad the Sailor Studying classic poems, looking at descriptive language and writing own description poems. Retell famous adventure/fantasy stories. Focus on suspense writing, fantasy writing – building a 5 part story.		**Theme: Aztecs** Chocolate theme – Charlie and the chocolate factory – Charlie and the chocolate factory letter writing and fantasy writing. Understanding the life of Aztecs, who they were, when they lived etc. Study of Moctezuma 2nd. Non-fiction report writing, information finding.	
CYCLE D	**Theme: Tudor Times** Shakespeare focus (Macbeth (Halloween), Midsummer night's dream) Looking at personal response, completing character studies and writing play scripts. Workshop company – drama Poetry – turning well known Shakespeare novels into different forms of poems. Theatre performances Drama/role play – using dialogue, recognising the difference between spoken and written speech. Suspense writing – show children how to build suspense through the story Icoriander By Sally Gardener.		**Theme: Dark Skies** Focus texts: Star wars, Dr who, back to the future, time travel Mars mission UFOs and Aliens: Investigating Extra-terrestrial visitors Extreme By Paul Mason. UGO Diary Bu Satoshi Kitamura – writing recounts/non-fiction writing Science fiction focus – Tales from outer Suburbia By Shaun Tan Focus on suspense writing, fantasy writing – building a 5 part story.		**Theme: Vikings and Invaders** To research Viking Britain – non fiction writing. To write recounts of the Battle of Hastings – the Norman Conquest in 1066. Roleplay/drama the story of the Vikings. Text focus – how to train your dragon By Cressida Cowell – linked to fantasy writing and link to heroes and villains.	

Swarland Primary School Long Term Plan For KS2 Design Technology

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**Theme: Greeks** To design and create an authentic Greek dish fit for a Greek banquet. Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active. Understand that there are a variety of influences on the food we choose to eat (eg who we are with, seasonality,health, where we live, occasion). Know and can follow basic food safety rules. Use simple food descriptors relating to flavour, texture and appearance. Identify what they would do differently next time to improve what they have made. Use a jug to measure liquids. Use weighing scales. Use bridge and claw hold to cut on harder foods. Know how to use tools such as mashers, garlic crushers. Know how to cut food into cubes (diced), strips. Assemble and arrange ingredients in simple dishes. Pupils should know how to use ovens, hobs and microwaves safely by observing adults and under close supervision. Begin to recognise appropriate ingredients to garnish hot and cold food.		**Theme: Healthy Living/World War** War time rationing and recipes. Know what constitutes a balanced and nutritious meal. Time my cooking and prep time, think ahead plan order of work, seek views of others about my design and product, ,present persuasive text on benefits of my product. Design and create a free standing stable photograph frame suitable to show your best picture of yourself.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. 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. Design and create a stable Anderson shelter strong enough to allow one person inside safely. Forest school activity. Use information from historical sources to help in design Anderson Shelter. Know what they were used for and materials which were available at the time including modern day equivalents. Know how to communicate ideas through labelled sketches showing details including cross sections and exploded diagrams. Build structure knowing how to strengthen with use of appropriate materials and shapes. Know how to stabilise structures to withstand greater loads (explosions), load bearing concepts, reinforcement techniques.		**Theme: The Sea** Design and create a working lighthouse to warn ships of danger. Know how a real lighthouse works, and its purpose. Look at some mechanical products to see how they function and meet users needs. Use knowledge of electrical circuits and switches to good effect .Know how ICT can be used to control programme to make mechanism work. Use knowledge of area and volume to calculate materials needed. Create series and parallel circuits progressing to circuits using electronics kits that employ components such as LEDs, resistors, transistors and chips. Control and monitor models using software designed for this purpose. Test out ideas and refine. Use high quality finishing techniques.. Evaluate their own and others products against their design criteria. Consider others views to improve their product. Understand how key individuals have shaped the world.	

CYCLE B

Theme: Egyptians

To design and create paper suitable for writing upon.
Explore Egyptian invention of paper. Compare historical process to modern day process and industrial methods of how to make paper. Explore paper making from newspaper and plant material. Clarify ideas through discussion, detailed sketches. Explain design to a partner explaining the benefits, refine and improve work, investigate and explore a range of existing products and evaluate. Follow written instructions and demonstration to make own paper from shredding newspaper, adding pulp, blending material. Experiment with different grades of wire frame to see which produces the best paper. Problem solve and think critically about how they can make the paper thinner, textured, add things into the paper to make it different, dye the paper. What could be used to add colour?
Evaluate their product against their design criteria.
Understand how key events and individuals have shaped the world.

Make waterwheels mechanisms in Forest School.
Investigate how water wheels works by researching existing products inc local water wheel at Cragside House.. Construct a stable frame and modify structure to be stronger and more stable if it requires.   Test ideas with prototypes to ensure correct movement .Measure materials accurately. Combine and assemble material using a range of joining techniques. Give reasons for choices. Consider material suitability for buckets and material for weight and waterproof properties. Test final product. Evaluate design and finished product against explicit design criteria. Suggest ways their product could be improved.

Theme: Romans

To design and create an authentic Roman dish fit for a Roman banquet.
Know the main food groups and the different nutrients that are important for health. Know appropriate portion sizes. Know some of the basic processes to get food from farm to plate. Understand some of the ethical dilemmas associated with the food people choose to buy. Use information on food labels to inform choice. Understand social influences on the food we choose to eat (eg media, peer pressure, ethics). Identify how they would change the recipe to improve the food they have made. Know, and can follow, food safety rules and understand their purpose. Use bridge and claw hold on harder foods whilst cutting with serrated knife. Dice foods and cut them into evenly sized, fine pieces. With supervision, handle hot food safely, using
oven gloves to carefully remove cooked food with a fish slice from a baking tray on to a cooling rack. Choose and use appropriate ingredients to garnish hot and cold dishes.
Design and make a working catapult to throw a marble more than one meter.
Know how catapults work and function through research including historical ideas – noting key events and individuals in DT that have helped shape their world.. 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. Select 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.

Theme: Anglo Saxons

Design and create a movie trailer for a classroom drama.

Develop and communicate ideas showing an understanding of the characteristics and function of their final trailer audience and purpose. Contribute to the development of success criteria for design briefs, think through the problems they might encounter and to share strategies to solve them. Know how to develop step by step plans, modifying them as appropriate. Clarify ideas through discussion, drawing and modelling. Evaluate observers reaction to trailer and implement improvements. Use a variety of information sources and research to inform their design plans. Create films, using digital media – i-movie APP. Film plays and drama. Know how to edit software to produce a movie trailer and improve based on feedback from others.

CYCLE C	**Theme: Digging Up The Past** To take inspiration from design through history. Explore using a range of tools and mechanisms. Use scientific knowledge of transference of forces to choose appropriate mechanisms for a product such as levers, pulleys and gears. Investigate how levers, pulleys and gears were utilised and have developed through time.	**Theme: Voyages** Design and create moving monsters or sea creatures based on mechanism of using pneumatics and or cams. Make products by working efficiently and carefully selecting materials. Make products through stages of prototypes, making continual refinements.	**Theme: Aztecs** Explore using chocolate as material to create a product. Design with purpose by identifying opportunities to design. Create chocolate product to advertise such as Easter egg, chocolate bar. Use moulds, templates. Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.
CYCLE D	**Theme: Tudor Times** To design and make a Tudor House model using a structure stable enough to stand alone. Use information from historical sources to help in designing Tudor house. Know how to communicate ideas through labelled sketches showing details including cross sections and exploded diagrams. Build structure knowing how to strengthen box models, card/wooden constructions. Know how to stabilise structures to withstand greater loads through shape, load bearing concepts, reinforcement techniques. Know how to cut accurately by measuring using tools such as scissors, craft knives, hand saws. Know how to use joining techniques including hot glue, stapling, taping. Know and use finishing techniques so product is finished to a high quality	**Theme: Dark Skies** To design and create a sun dial device that uses the position of the sun to reflect the time. Forest School activity. Sketch and model a variety of design ideas and model one in depth. Research existing products, evaluating what they like and dislike about them including functionality and appearance. Compare views. Know that a sun dial has an upright stick, called a gnomon and is positioned to cast a shadow onto a pre-marked sundial face. As the sun moves across the sky, the shadow also moves. Use this knowledge to support design. Create mock ups of generated ideas to test if they work. Know how to select appropriate materials, tools and techniques for the task. Measure and mark out accurately. Use skills in using different tools and equipment safely and accurately e.g. hack saws, sand paper, drills, screwdrivers, hammers, etc. Cut and join with accuracy to ensure a good-quality finish to the product. Know and use a greater variety of finishing techniques, e.g. wood stains and varnish and know how this impacts on longevity.	**Theme: Vikings and Invaders** To design and create a model Viking longship with sails, strong enough to sail on water and move with the power of wind. Investigate long boat construction in historical times and compare to modern day boat making techniques. Know how boats move with the power of wind in its sails. Create a model boat using suitable waterproof materials and or finishing techniques. Design and create sails using a range of textiles with appropriate stitching technique. Know how to thread a needle and tie knots. Begin to understand the need for a seam allowance. Begin to use sewing machines with supervision. Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material such as slots and cut outs. Explain the methods they used to identify the problem or to tackle a task. Test product and modify boat or suggest future improvements and how these would be done.

Swarland Primary School Long Term Plan For KS2 History

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**Theme: Greeks** Lifestyles and events that occurred in ancient Greece. Use key word and phrases about the past, use key dates to describe events, present work using simple slideshows. Know that people's lives in a historical period were not all the same. Use role play to show different viewpoints, combine info I have found with that of others to understand a period in history. Know the lifestyles and civilization of the Ancient Greeks through exploring their food and diets. Know Greek Gods and how they worshipped them and their beliefs. Name key Greek monuments such as Parthenon. Know that Greeks were great philosophers and educators of the time. Know about the Olympic games and its legacy – its origins and how it was celebrated. Contrast Olympics then and now studying gender equality. Explore Greek law and advocating democracy. Connected History- Enquiry 17 'Trojan Horse'		**Theme: Healthy Living/World War** Know that Adolf Hitler & Nazi Party, wanted Germany to rule Europe. To gain more land and power, on 1 September 1939 German troops invaded Poland. After Hitler refused to stop the invasion, Britain and France declared war on Germany – World War II had begun. Look at allies in Europe and beyond. Look at the conditions for soldiers in the war. Look at battles, tactics, transport, weaponry and fallout including memorials. Explore the home front, dig for victory and rationing. Connected History- Enquiry 14 'Battle of Britain, Enquiry 18 'British Empire'		**Theme: The Sea** Local history study of life and times of Grace Darling. Field work skills to Grace Darling museum to consider interpretations of an event knowing some information is more reliable than others. RNLI Titanic. Compare and contrast aspects of modern day life to those in the past, place changes in a chronological framework, summarise events in a lively and imaginative way. Local castles in Northumberland area by the sea. Local history study- heroine Grace Darling and how she rescued shipwrecked sailors on the Northumbrian coast. Explore peril and dangers of sea, monuments erected to those who lost or saved lives. Compare to other historical disasters such as Titanic sinking. Explore the character of Molly Brown, lifestyles of people on the ship, segregated by class and wealth. Compare clothing and lifestyles of the times of both through artefacts and evidence.	
CYCLE B	**Theme: Egyptians** Study of one of earliest ancient civilizations. Explore their use of clothing, make up and diet. How the River Nile influenced their living, trade. Explore famous monuments of the pyramids and how they were used for their pharaoh leaders. The influence of Gods on their daily lives including the sun God. Investigate process of mummification and other medicine and nursing techniques.		**Theme: Romans** Hadrian's wall, Life and times of Pliny the Elder, Julius Ceasar Find out about and analyse information sought by visits to local historical sites and museums. Know about the Roman Empire and its impact on Britain. Ask and answer questions, select and record information based on the enquiry focus. Explore life and events of ancient Rome, the spread of the Empire and what its legacy has been for us now. Using a variety of history sources of evidence begin to understand the era. Local history study of Hadrian's Wall. Know about Julius Caesar and how he worked . Explore senate in a republic vs democracy. Know how far the Roman Empire extended and conquered lands with its army and how it came to its downfall. Know about Roman lifestyle of clothes, laws, beliefs. Know how BC and AD was established and what it symbolises. Look at the ethics of slavery, social class. Explore political assassinations. Explore language inc Latin, roman numerals, education. Connected History- Enquiry 10- Romans, Enquiry 15- 'York'		**Theme: Anglo Saxons** Local history link with Bede. Explore chronology of Roman Emperor leaving Britain and invaders from Scots from Ireland into Scotland and Picts fighting the British. Investigate settlements, migration, invasion, conquest, raiding and reinforce earlier vocabulary such as archaeology and evidence. Alfred, Bede, Viking raids, capture of York. How are Scottish place names are different. Maps of different kingdoms – Mercia, Wessex and Northumbria and Danelaw. Myths and legends such as Hengist and Horsa and Beowulf and the reliability of such evidence. Compare to Vikings. . Connected History- Enquiry 11- Anglo Saxons, Enquiry 15- York	

CYCLE C	**Theme: Digging Up The Past** Exploring the stone age to the iron age. Investigate early civilizations and their place in chronology. Explore fossils and inferring about the past through the use of bones and fossils. Begin to place events, artefacts and historical figures on a time line using dates. Seek out and analyse a wide range of evidence in order to justify claims about the past. Explore Stone Age and progression to Iron Age through artefacts which have been dug up and discovered. Explore use of tools, their lifestyles, clothes and dwellings. Look at difference between artefacts and fossils – explore extinction and evolution. Connected History- Enquiry 7 'Stone Age', Enquiry 8- Bronze age, Enquiry 9- Iron age	**Theme: Voyages** Explore Darwin and his concept of evolution over time and changes that occurred to instigate change. Research into historically significant voyages over rivers and mountains and to new worlds and continents. Explore famous historical figures such as Columbus, Philleas Fogg ,Scott , Franklin and his Arctic/Antarctic expedition. Look at the lives and events and actions that led to their journeys and discoveries. Know about the transport used, challenges faced. Know how they survived the extreme weather, kit and equipment needed in polar regions.	**Theme: Aztecs** Explore the life and times of the Aztecs. Explore their life styles, social set up, religious beliefs, technological and cultural changes in that period. Research into famous Aztecs and their trade links. Begin to select suitable sources of evidence giving reasons for their choices. Explore ancient civilization of the Mayans and Aztecs - culture that flourished in central Mexico in the post-classic period from 1300 to 1521. Know about their Gods, beliefs and religion including the use of sacrifice and explore the ethics of this. Aztecs had their own currency in gold and cocoa to trade. Explore the lifestyles, clothes, homes and social class of the people. Look at the monuments they built including Templo Mayor in Mexico City as well as other achievements in architecture and the arts.
CYCLE D	**Theme: Tudor Times** Exploration of the Monarchs of Britain beyond 1066 including Elizabeth 1st and Henry 8th. Study of significant changes which occurred during their reign including the creation of the Church Of England, changes to laws. Investigate famous people around at this time including Sir Walter Raleigh and Shakespeare.	**Theme: Dark Skies** Investigate the historical space race and the political motivation for this. Explore historical space missions beyond living memory such as the landing on the moon and within living memory, Mars Mission. Explore future planned missions such as humans living on Mars. Place these on timelines using dates. Identify period of rapid change in history and contrast them with times of relatively little change.	**Theme: Vikings and Invaders** Explore the local history of Lindisfarne including its castle and surrounding area. Investigate the significance of the Lindisfarne Gospels. Discover which areas were invaded by Vikings and other Invaders and what their impact has been on the area. Research into the life and times of Vikings. Use vocabulary such as era, chronology, dates, change, century and legacy. Local history link with Bede. Explore chronology of Roman Emperor leaving Britain and invaders from Scots from Ireland into Scotland and Picts fighting the British. Investigate settlements, migration, invasion, conquest, raiding and reinforce earlier vocabulary such as archaeology and evidence. Alfred, Bede, Viking raids, capture of York. How are Scottish place names are different. Maps of different kingdoms – Mercia, Wessex and Northumbria and Danelaw. Myths and legends such as Hengist and Horsa and Beowulf and the reliability of such evidence. Compare to Vikings. Connected History- Enquiry 12- 'Vikings'

Swarland Primary School Long Term Plan For KS2 Art

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**Theme: Greeks** Understand a range of other cultures art and use this as inspiration for my own design. Use drawing and sculpture with purpose and meaning. Understand the viewpoints of others by looking at images, people and places from different view points. Experiment with different materials and techniques and find best one for purpose. Greek plates, clay pots and clay figure sculpture, life drawing, Greek busts.		**Theme: Healthy Living/World War** Figurative drawing. Life drawing. Study of Bridget Riley work as optical art movement, black and white images. Funny bones figures. Experience an art gallery. Considering size of famous art works. Creating large scale and small scale work. Collaborative work. Assessing and evaluating work. Blitz skyline – background wash of colours with silhouettes. Campaign posters – key messages coming out from the war e.g Dig For Victory.		**Theme: The Sea** Study of Lowry as he holidayed in Northumberland by the sea. Explore his work and inspirations. Artists who created seascapes. Water colour painting techniques, colour mixing. Investigating and experiencing techniques used for working with water colour paints. Creating a colour wash background using paint or ink. Investigating how famous artists have depicted the sea. Create a contemporary representation of the sea using a choice a media.	
CYCLE B	**Theme: Egyptians** Investigate Egyptian headdresses and jewellery – design and make a range of headdresses and jewellery using colours and patterns of the time. Know which materials were used in the past and modern day equivalence. Know historical jewelers were skilled craftsmen. Know the jewelry was made out of copper and gold wire, gemstones, coloured glass beads, and painted clay beads. Explore features of wide collars, rings, earrings, and bracelets worn at the wrist, upper arm and around the ankle. Know what faience is (a ceramic material made from crushed quartz and other natural materials, covered with a blue or green glaze.) Understand purpose of jewelry for adornment, social status, and protection. Know the importance of gold - Gold was considered blessed by the gods and used on everything religious from statues to temple art to funeral masks. And jewelry for both the living and the dead. .		**Theme: Romans** Mosaics Make images using textiles and ceramics to communicate ideas using colour and pattern, describe and explain art from other cultures and know how artefacts came to be in museums. Experimenting with pencil, chalk charcoal, pastels and paint as media to achieve tones of light and shade. Drawing from first hand experience using observation techniques. Investigating the work of Albrecht Durer.		**Theme: Anglo Saxons** Artwork as illustrations Experiment with different materials and techniques to find the best ones for the purpose of my work, advertise my book cover Knowing and recognising the work and styles of a range of illustrators both historic and contemporary. (e.g. Quentin Blake, Gerald Scarfe, Arthur Rackham etc).Drawing techniques, (line and sketch). Using colour to achieve impact in illustration. Understanding how illustration can influence others' perception of a story or character.	
CYCLE C	**Theme: Digging Up The Past** Exploring the materials and tools used by cave men to draw and paint cave paintings. Examine how the materials were made using natural materials. Replicate similar mediums using present day equivalents. Explore the culture of telling stories through pictures. Use a number of brush techniques using thick and thin brushes including fingers to produce shapes, textures, patterns and lines.		**Theme: Voyages** Observational drawings of animals and plants. Examine the book plates and investigational scientific drawings of Darwin and other scientists and botanists who recorded plant and animals species in great detail. Explore their use of line and use of hardness of pencils to show line, tone and texture. Use a variety of techniques to add interesting effects.		**Theme: Aztecs** Create and explore pattern and tessellation taking inspiration from the Aztecs. Create accurate patterns showing fine detail. Give details in own sketches and research about the style of other notable artists and designers. Create their own original pieces that show a range of influences and styles. Comment on artworks with a fluent grasp of visual language.	

CYCLE D	Theme: **Tudor Times** Explore Elizabethan clothing particularly the ornate gowns of Queen Elizabeth First. Explore which techniques may have been used to create the gown particularly the stitching and finishing touches. Use this influence to inspire work using basic cross stitch and back stitch. Shape and stitch a variety of materials. Explore weaving, plaiting, quilting, padding and gathering. Combine these techniques to create a piece of art.	Theme: **Dark Skies** Installation 3D artwork. Explore the effort and result of working together to create one piece of art work. Look at the renaissance painters who had help and assistance working together on one piece of work. Create and combine shapes to create recognisable forms. Include texture that conveys feelings, expression or movement.	Theme: **Vikings and Invaders** Historical art work investigating the Lindisfarne Gospels. Explore how they were made and the materials and tools used to create the images and illuminated lettering. Replicate similar techniques using modern day materials. Develop a personal style of painting and drawing based upon the ideas of others.

Swarland Primary School Long Term Plan For KS2 Geography

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	Theme: **Greeks** People and locality of modern Greece. Use correct geographical vocab to describe features of locality, use internet to find out about contrasting locality. Know about how changes to a place can affect the lives of people – physical geography volcanoes Describe how places all over the world are linked, use atlases to locate and map places. Connected Geography- Why are mountains so important?		Theme: **Healthy Living/ World War** Regional food from different countries, name and locate counties of UK. Plan routes and work out distances of food import export using map scales, read symbols on ordnance survey maps. Economic impact of food transport. Fair Trade – banana journey – food miles. Describe and understand key aspects of human geography, including: types of settlement and land use and the distribution of food, minerals and water. Connected Geography- How can we live more sustainably? Why is fair trade fair?		Theme: **The Sea** To read and use local maps of a local area. To use fieldwork to observe measure and record the human and physical features in the local area – Holy Island, mapping and locating castles on Ordinance Survey. To know where in the world we are, names the seas and continents on a globe. To use the eight points of a compass to compare places in the world with England and Northumberland. Connected Geography- What is a river?	
CYCLE B	Theme: **Egyptians** Other countries cultural celebrations around the world. Use internet to find out about contrasting locality, analyse differences and similarities on contrasting localities. The River Nile – human and physical geography of the area. Nile as a trade route, source of water for crop rotation using irrigation methods. Explore Africa as a continent. Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Connected Geography- Why do so many people live in megacities?		Theme: **Romans** Modern day Roman Empire. Identify and locate including longitude and latitude of places in Roman Empire then and now, compare similarities and differences, communicate features using precise vocabulary. Understand geographical similarities between a region in UK, Italy and somewhere in north or south America. A study of the physical and human geographical features of Rome and Italy. Connected geography- Why do some earthquakes cause more damage? How do volcanoes affect the lives of people?		Theme: **Anglo Saxons** Books from other cultures. Locate countries around the world, concentrating on, major cities. Atlases as a source of information. Augmented globes through atlases. Name and locate counties and cities in the UK where famous authors are from, identify human and physical characteristics, key topographical features and understand how they have changed over time.	

CYCLE C	**Theme: Digging Up The Past** Explore the physical geography created by the historical changes to the world through tectonic plate shifting and continental drift. Explore how this created the continents as we know them today and the oceans. Name and locate the continents and oceans. Investigate how volcanoes and mountain ranges were formed throughout the ages. Connected Geography- How and why is my local area changing?	**Theme: Voyages** Orienteering skills. Examine historical explorers voyages. Where did they go? What did they discover? Explore their voyages over rivers and mountains and look at what they discovered. Map and plan routes that they took. Use longitude and latitude in mapping skills. Describe key aspects of physical geography and human geography using accurate and developing vocabulary. Connected Geography- Beyond the magic kingdom…. Why are jungles so wet, and deserts so dry?	**Theme: Aztecs** Geographical research into North and South America. Compare and contrast this location to the UK. Investigate the physical and human features of the area. Including climate zones, rivers, mountains, earthquakes, settlements, land use and the water cycle. Identify patterns and population densities.
CYCLE D	**Theme: Tudor Times** Investigate the UK capital city of London and its attractions. Compare city of London to rural Northumberland. Investigate land use and tourism in both areas. Describe how both localities have changed over time. Connected Geography- Who are Britain's national parks for?	**Theme: Dark Skies** Investigate the local heritage and geographical significance of the Kielder Observatory and Dark Skies Award. Locate Northumberland on satellite images and compare and contrast light pollution in other parts of the UK. Field trip to the observatory and surrounding area. Connected Geography- How is climate change affecting the world?	**Theme: Vikings and Invaders** Compare and contrast Viking settlements including local Northumberland sites. Fieldwork skills in visiting geographical site of Lindisfarne including the castle. Geographical features of Lindisfarne including features of a tidal island. Explore the geographical domain in Scandanvia. Connected Geography- Who are Britain's national parks for?

Swarland Primary School Long Term Plan For KS2 Science

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

CYCLE A

Theme: Greeks

LKS2 – STATES OF MATTER

Group and compare solids, liquids, gases.

Explain change of state with heating and cooling (.()C)

Investigate role of evaporation and condensation in water cycle

UKS2 – STATES OF MATTER

Compare and group materials based on properties.

Explain dissolving to form a solution. Recovery. Separating mixtures.

Reasons for material uses based upon testing evidence.

Dissolving, mixing, changes in state are reversible.

Irreversible changes.

Theme: Healthy Living

LKS2 ANIMALS INC HUMANS

Digestive system .Describe the simple functions of the basic parts of the digestive system in humans.

Identify the different types of teeth in humans and their simple functions and structures.

Construct simple food chains and understand concepts of producer, consumer, predator and prey.

LKS2 ANIMALS INC HUMANS

Identify and name parts of the circulatory system. Functions of the heart, vessels and blood.

Impact of diet, exercise, drugs and lifestyle on body function.

Transportation of water and nutrients in animals.

Theme: The Sea

LKS2 LIGHT

Know light is reflected off surfaces. Find patterns that determine size of shadows, ask questions, set up enquires, gather, record and present and analyse data. Recognise that they need light in order to see things and that the dark is the absence of light. Know that light is reflected from surfaces. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the size of shadows changes.

UKS2 LIGHT

Light travels in straight lines from a light source or reflected into the eye. Ray model to explain size of shadows (prediction).

LKS2 ELECTRICITY

Know and identify common appliances that use electricity – lighthouses. Review and compare results and predictions, create and test electrical circuits with conductors, insulators, buzzers, switches. Use recognised symbols when representing a simple circuit in a diagram. Construct simple circuits and series circuits.

UKS2 ELECTRICITY

Explain variation in brightness, loudness with number and voltage in cells used.

Explain variations in component function – brightness, loudness, on/off.

Recognise symbols in circuit diagrams.

CYCLE B	**Theme: Egyptians** **ALL KS2 ROCKS** Compare and group rocks based on physical properties. Fossil formation – trapped in rock. Recognise soils are made from rocks and organic matter.	**Theme: Romans** **LKS2 FORCES & MAGNETS** Compare how things move on different surfaces. Explore push and pulls Contact forces and distance forces – gravity, magnetism Magnets attract/repel; two poles. Compare and group materials with magnets. **UKS2 FORCES** Explain objects fall towards earth due to force of gravity. Effects of air and water, resistance and friction. Some mechanisms including levers, pulleys and gears allow a smaller force to have a greater force.	**Theme: Anglo Saxons** **LKS2 PLANTS** Identify the functions of different flowering plants, roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth, air, light, water, nutrients from soil, and room to grow, investigate ways in which water is transported within plants, explore the life cycle of a plant. Explore the requirements of plants for life and growth and how they vary from plant to plant. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal **UKS2 ALL LIVING THINGS** Life cycles of mammal, amphibian, an insect and a bird. Describe reproduction in some plants and animals including sexual or asexual
CYCLE C	**Theme: Digging Up The Past** **LKS2 ANIMALS INCLUDING HUMANS** Get nutrition from food. Skeletal and muscular system with simple names and functions. Life cycle of bird and mammal. **UKS2 ANIMALS INCLUDING HUMANS** Changes as humans develop to old age including puberty. **UKS2 EVOLUTION & INHERITANCE** Focus on the famous scientist of Charles Darwin focusing on evolution and inheritance. Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	**Theme: Voyages** **LKS2 LIVING THINGS & HABITATS** Recognise that living things can be grouped in different ways. Explore and use keys. Identify and name a variety of living things in the environment. Recognise environments change and pose dangers to living things. **UKS2 LIVING THINGS & HABITATS** Describe classification into broad groups – animals, plants, microbes based on observable features. Reasons for classifying plants and animals based on specific characteristics.	**Theme: Aztecs** Explore the heating and cooling of substances and the properties of materials including chocolate and cocoa bean. **LKS2 – STATES OF MATTER** Group and compare solids, liquids, gases. Explain change of state with heating and cooling (.()C) Investigate role of evaporation and condensation in water cycle **UKS2 – STATES OF MATTER** Compare and group materials based on properties. Explain dissolving to form a solution. Recovery. Separating mixtures. Reasons for material uses based upon testing evidence. Dissolving, mixing, changes in state are reversible. Irreversible changes.

CYCLE D

Theme: Tudor Times

LKS2 PLANTS

Identify the functions of different flowering plants, roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth, air, light, water, nutrients from soil, and room to grow, investigate ways in which water is transported within plants, explore the life cycle of a plant. Explore the requirements of plants for life and growth and how they vary from plant to plant. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

ALL KS2 SOUND

Identify how sounds are made.

How sounds travel through medium to ear – vibration.

Explain sound travels away from source. Gets fainter

Patterns in pitch and object. Patterns in volume and vibration.

Theme: Dark Skies

ALL KS2 EARTH & SPACE

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night.

LKS2 LIGHT

Know light is reflected off surfaces. Find patterns that determine size of shadows, ask questions, set up enquires, gather, record and present and analyse data. Recognise that they need light in order to see things and that the dark is the absence of light. Know that light is reflected from surfaces. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.
Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the size of shadows changes.

UKS2 LIGHT

Light travels in straight lines from a light source or reflected into the eye. Ray model to explain size of shadows (prediction).

Theme: Vikings and Invaders

LKS2 FORCES & MAGNETS

Compare how things move on different surfaces. Explore push and pulls
Contact forces and distance forces – gravity, magnetism
Magnets attract/repel; two poles.
Compare and group materials with magnets.

UKS2 FORCES

Explain objects fall towards earth due to force of gravity.
Effects of air and water, resistance and friction.
Some mechanisms including levers, pulleys and gears allow a smaller force to have a greater force.

LKS2 ELECTRICITY

Know and identify common appliances that use electricity – lighthouses. Review and compare results and predictions, create and test electrical circuits with conductors, insulators, buzzers, switches. Use recognised symbols when representing a simple circuit in a diagram. Construct simple circuits and series circuits.

UKS2 ELECTRICITY

Explain variation in brightness, loudness with number and voltage in cells used.
Explain variations in component function – brightness, loudness, on/off.
Recognise symbols in circuit diagrams.

Swarland Primary School Long Term Plan For KS2 Computing

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
CYCLE A	**Theme: Greeks** Know about how the computer networks work. Use the internet in a multiple of ways, search the world-wide web to do with Greek topics and to communicate and collaborate. Know how to use a variety of software. Select, use and combine a variety of software on a range of digital devices to collect, analyse, evaluate and present data and information to do with Greeks. *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		**Theme: Healthy Living/World War** To create a healthy us poster/information booklet on a healthy lifestyle aspect. Select, use and combine a variety of software on a range of digital devices to and present healthy us information. E-safety Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour. *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		**Theme: The Sea** Know how to write a control program. Design, write and program a series of instructions and algorithms to make a repetitive sequence of a lighthouse working on an electrical circuit. To understand the story about why Grace Darling is famous and to show this using a programme on the computer. Present information on the computer to do with Grace Darling. *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	Theme: **Egyptians**	Theme: **Romans**	Theme: **Anglo Saxons**
	Know how to publish newspaper content in multimedia J2webby to publish reports on website. Design, write and debug programmes to accomplish a goal. **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 .	Use sequence, selection and repetition in programs. Search for information on Romans use different search technologies effectively. **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. Link the two units together and use the learning to search for information on Romans.	Audio books, record audio of book reviews for others using Aurasma. Creating and recording own sounds. Create podcasts and films using a variety of technological aids. **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

CYCLE C

Theme: Digging Up The Past	Theme: Voyages	Theme: Aztecs
Know about how the computer networks work. Use the internet in a multiple of ways, search the world-wide web to do with stone age to iron age topics and to communicate and collaborate. Know how to use a variety of software. Select, use and combine a variety of software on a range of digital devices to collect, analyse, evaluate and present data and information to do with the stone and iron ages.	J2e/story creator – sequence pictures and captions to retell a voyage story Design a game on scratch/makey makey to do with a character/ to make a simple interactive scene of an event within a story.	Use sequence, selection and repetition in programs. Search for information on Aztecs and use different search technologies effectively. Audio books, record audio of book reviews for others using Aurasma –linked to Charlie and the chocolate factory.
3.2 – Creating Media – Animation (Stone Age stories) 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 (Non-chronological reports)** 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	**4.5 – Programming – Repetition in Shapes (Maths – Geometry and accurate 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
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	**3.4 – Data and Information – Branches Databases (Science (living things) and classification, creating a database with yes/no question)** 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	**4.6 – 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 D

Theme: Tudor Times

Morpho Booth App to communicate historical findings through characterisation.

3.1 – Computer Systems - Connecting Computers (PSHE – link to mobile phone uses and safety)
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.

4.2 – Creating Media – Audio Editing (to communicate historical findings through characterisation)
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

Theme: Dark Skies

Children to listen to Gustav Holst – Piece of music called 'The planets'. Children to use create app to design their own piece of planet music to explain the eight planets. Music link.
Children to track ISS and satellite pictures on the internet.

3.5 – Programming – Sequencing through music (design and create their own piece of planet music to explain the eight planets)
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

4.1 – 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

Theme: Vikings and Invaders

To create a Viking information booklet or a step by step guide on how to train your dragon.
Select, use and combine a variety of software on a range of digital devices to and present healthy us information.
E-safety
Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour.

4.4 – Data and information – Data logging (Maths – data collection and statistics)
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

3.6 – 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

Theme: Greeks

Know about how the computer networks work.

Use the internet in a multiple of ways, search the world-wide web to do with Greek topics and to communicate and collaborate.

Know how to use a variety of software.

Select, use and combine a variety of software on a range of digital devices to collect, analyse, evaluate and present data and information to do with Greeks.

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.

Theme: Healthy Living/World War

To create a healthy us poster/information booklet on a healthy lifestyle aspect.

Select, use and combine a variety of software on a range of digital devices to and present healthy us information.

E-safety

Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour.

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.

Theme: The Sea

Know how to write a control program.

Design, write and program a series of instructions and algorithms to make a repetitive sequence of a lighthouse working on an electrical circuit.

To understand the story about why Grace Darling is famous and to show this using a programme on the computer.

Present information on the computer to do with Grace Darling.

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

Theme: Egyptians

Know how to publish newspaper content in multimedia J2webby to publish reports on website.

Design, write and debug programmes to accomplish a goal.

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.

Theme: Romans

Use sequence, selection and repetition in programs.

Search for information on Romans use different search technologies effectively.

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.

Theme: Anglo Saxons

Audio books, record audio of book reviews for others using Aurasma.

Creating and recording own sounds.

Create podcasts and films using a variety of technological aids.

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.

CYCLE C

Theme: Digging Up The Past

Know about how the computer networks work.

Use the internet in a multiple of ways, search the world-wide web to do with stone age to iron age topics and to communicate and collaborate.

Know how to use a variety of software.

Select, use and combine a variety of software on a range of digital devices to collect, analyse, evaluate and present data and information to do with the stone and iron ages.

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
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Theme: Voyages

J2e/story creator – sequence pictures and captions to retell a voyage story

Design a game on scratch/makey makey to do with a character/ to make a simple interactive scene of an event within a story.

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.

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Theme: Aztecs

Use sequence, selection and repetition in programs.

Search for information on Aztecs and use different search technologies effectively.

Audio books, record audio of book reviews for others using Aurasma –linked to Charlie and the chocolate factory.

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.

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CYCLE D

Theme: Tudor Times

Morpho Booth App to communicate historical findings through characterisation.

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.

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Theme: Dark Skies

Children to listen to Gustav Holst – Piece of music called 'The planets'. Children to use create app to design their own piece of planet music to explain the eight planets. Music link.
Children to track ISS and satellite pictures on the internet.

5.2 – Creating Media – Vector Drawing
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Theme: Vikings and Invaders

To create a Viking information booklet or a step by step guide on how to train your dragon.
Select, use and combine a variety of software on a range of digital devices to and present healthy us information.
E-safety
Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour.

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.

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