Littleham CE Primary School Year 4 Rolling Programme

	Term 1 - Autumn	Term 2 - Spring	Term 3 - Summer
	I Am Warrior! 	**1066** 	**Blue Abyss** 
Key Vocabulary Tier 3 words Tier 2 words	amphitheatre, aqueduct, barbarian, Britannia, Caledonia, cassis, Celts, centurion, chariot, Colosseum, **emperor**, forum, Gaul, **gladiator**, gladius, Hibernia, **invader**, invictus, lanista, Latin, legion, mosaic, pilum, pugio, **Roman Empire, Roman numerals**, **Romans**, scutum, servus, soliloquy, **taxes**, via	Anglo-Saxon, **archery**, **armour, attack,** bailey, baron, barracks, Bayeux Tapestry, calligraphy, **castle**, chapel, civil war, commission, compound, conflict, conqueror, coronation, **defences, drawbridge, embroidery,** forge, **helmet**, hessian, hierarchy, **imprisoned**, **invasion**, keep, **kingdom**, knight, moat, monarchy, motte, Norman, opponent, oppression, palisade, pottage, primogeniture, re-enactment, reconstruction, resolution, serf, shire, siege, squire, succession, tabard	abyss, adaptation, algae, annelid, **aquarium**, aquatic, arthropod, bioluminescent, cnidarian, **consumer**, coral, crustacean, **current**, diversity, echinoderm**, fish**, **food chain, habitat,** invertebrate, mammal, marine, mollusc, **ocean**, oceanography, organism, pollution, polyp, **predator**, prey, produce, reef, **reptile**, sea anemone, sea urchin, **seaweed**, sonar, species, specimen, submarine, tide, **tropical**, vertebrate

Littleham CE Primary School Year 4 Rolling Programme

Project overview	I am Warrior! I am strong, brave and powerful. Meet me in battle. Draw your sword, wield your axe and challenge me if you dare! Invade and attack, Romans versus the Celts, the fight is on. Discover warring Britain: meet Claudius, Boudicca and Julius Caesar, and find out what the Romans did for us. Get ready for Gladiator School and learn alongside Spartacus and Spiculus: brave fighters of the Roman Colosseum. When all that battling makes you hungry, relax, lie back and feast yourself on dormice and grapes, or perhaps a roasted swan sprinkled with nuts?	It's probably the most famous date in English history – we're travelling back to 1066! These are troubled times and there is danger afoot. A much-loved king is dead, and a French Duke has staked a claim for our kingdom. Not to mention all the other wannabe monarchs! Discover a changing England, shaped by shires, protected by castles and ruled by foreign knights. Use the famous Bayeux Tapestry to explore the significant events of 1066. What happened when, and how did William come to be called the Conqueror? Design a castle with defences strong enough to hold back the enemy. What about a space for fine dining and revelry? Try and build a happy (but safe!) home – you're the architect! Are you ready for the Norman invasion? Then don your armour and watch your back!	Grab your wetsuit! We're going deep into an underwater world of incredible coral and mysterious sea creatures. Head to your local aquarium and learn about life in the ocean. Can you pick a favourite fish, plant or animal? What do real divers get up to below the surface? Create a fishy story about exploring an amazing underwater world. Time to go a little deeper into our seas. Make a model deep-sea submarine that can withstand great pressure and travel to the deepest, darkest places on Earth. Make sure you test it first! What are those bright lights in the distance? It's a group of bioluminescent sea creatures! Look closely and create a colourful, 3-D art exhibition when you rise to the surface. Flippers on? Snorkel ready? Let's head into the Blue Abyss.

When reviewing our curriculum rolling programme, we considered the key aspects of our CURRICULUM INTENT as:

To provide a curriculum which encourages pupils, within a supportive Christian environment, to aspire to reach their full potential. This will be achieved through experiential learning, using the richness of our local rural community and culture, but also by opening the children's eyes further to gain knowledge about, and see the opportunities in, the wider British, European and global contexts.

Littleham CE Primary School Year 4 Rolling Programme

Term 1 – Autumn	
What are the key pieces of knowledge we want children to remember, be able to build upon and to reflect on within each subject area of this topic? **Text in this colour relates to key pieces of knowledge linked specifically to our Curriculum Intent.** **Text in this colour describes example activities to support the main theme of the topic.**	
Main Topic	**I am Warrior!**
History	Key changes and events of historical periods can be placed on a timeline, such as the dates of changes in leadership, key battles and invasions, achievements, scientific developments and deaths. Romans invaded Britain 55BC, 54BC and 43AD. Romans used various types of cranes to aid construction of homes and buildings. **Chronology** Know how to describe key leaders of an empire and why they are key. Know how to explain important social and political phenomenon from an era such as gladiators. Know how to compare and contrast how some groups lived in the past compared with others (Romans/Anglo Saxons). Know how different cultural beliefs impacted on key aspects of life such as buildings. **Historical Enquiry** Know how to interpret primary sources of history with some independence. Know how to make judgements about what primary sources tell us about life during periods studied and begin to consider bias. Know how to begin to independently use a range of primary and secondary sources to construct layouts/plans of buildings.

	Know how to use evidence to make a judgement about achievements. **Interpretations of History** Know how to explain why some people living during the studied period had different viewpoints. Know how to decide upon and justify whether they think a significant character was great. **Continuity and Change** Know how to compare and contrast the homes of people from two groups of people who followed each other chronologically (understand how people lived depended on the culture of their own lands and not the land they were coming to). **Cause and Consequence** Know how to make a judgement on the impact of harsh treatment on a group of people/population **Similarities and Differences** Know how to explain with evidence how some wealthy classes in some civilisations have sought to influence lower classes (i.e. Roman gladiators) **Significance** Know and explain why a taught historical period is considered significant. Know and explain why some battles have become significant in the view of English historians. **Black and British** ***Key Question – How Shall We Tell the Story of The First Black Britons in Britain*** Know that the first recorded African community in Britain was based at Burgh by Sands some 1,800 years ago. There was a fort on Hadrian's wall at Burgh by Sands, known to Romans as Aballava.

	Know that the Libyan born emporer Septimius Severus came to Britain in AD 208. Use a timeline to mark changes in leadership starting with Augustus 31 BCE, Claudias 41CE, Titus 79 CE. The Romans arrived in the South West in about 50AD. They built a wooden fort on a hill near the river Exe. A town was then created on this fort called Isca Place the era of the Roman Empire in Britain on a timeline with other significant periods in our history previously studied as well as those to be studied. Display at front of class. Visit Exeter to look at the Roman City Wall and work with Exeter red coat tours. Part of the visit to include focused activities at the RAMM. 'Rom' the Roman to visit and coordinate a Roman invasion enactment.
Geography	An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. **Locational Knowledge** Know the difference between the British Isles, Great Britain and UK. Know the countries that make up the European Union, and the fact that Britain is now not part of it. Know the names of up to six cities in the UK and locate them on a map (revise Plymouth, Exeter, London, Cardiff, Belfast and learn Birmingham, Liverpool, Glasgow, Bristol, Manchester, Sheffield). Know how to locate and name some of the main islands that surround the UK – Hebrides, Shetland Islands, Orkney Islands, Isles of Scilly, Isle of Man. Know how to name and locate vegetation belts across the UK. **Place Knowledge**

	Know how to carry out research to discover features of cities and villages (could involve links to some of the smaller schools in our federation). Know why people are attracted to living in cities. Know why people may choose to live in a village rather than a city. Know how to name and locate vegetation belts across the UK, explaining how some oof these have changed over time. **Human Features** Know how people explain how people try to sustain environments. Know how to compare and contrast how areas of the world have capitalised on their physical and human features. **Physical Features** Know how to ask questions like – what is this landscape like?, what will it be like in the future? Know how physical activity has impacted and/or changed the physical characteristics of a place in the world. Know how to compare and contrast how areas of the world have capitalised on their physical and human features. Know how to understand the concept of vegetation belts. **Skills, Maps Work and Fieldwork** Know how to describe route and direction linking N,S,E,W with degrees on the compass. Know how to link words to topic e.g. contour, river, height, valley Know how to analyse evidence and draw conclusions e.g. make comparisons between locations using photos, pictures an maps.

	Know how to identify and explain different views of people including themselves. Know how to collect and record evidence, show questionnaire results in simple chart or colour coded maps which demonstrate patterns. Know how to communicate in ways appropriate to task and audience. Know how to draw sketch maps and plans using standardised symbols and key. Know how to locate and name geographical features on an Ordnance Survey map. Know how to plot a route on a map or a globe, from one place to another, identifying countries or significant landmarks that are passed. Know why settlements developed where they did. Know about the iron-age fort at Woodbury and why Exeter was chosen as a settlement. Almost 10% of the Roman Wall around Exeter still remains to be seen today. The city was first founded by Romans in 55AD due to good farmland around and a great water supply from the River Exe. Geographical features such as the River Exe led the Romans to settle with a river teeming with fish and fertile soil near-by. Exmouth is one of 15 British towns to appear on early Roman era maps. Littleham and Withycombe make up Exmouth town and can be traced back to pre -Saxon times. Use an atlas to locate and identify main continents, oceans and seas as well as where the UK is. Use detailed maps of the UK to identify where Exeter and Exmouth are. Find where Italy is and where the Roman Empire extended to at its height.
Science	**Discrete Science units- "How far can sound travel" and 'Can we block sound'.** **Sound** Know that vibrations are needed to create sound and that vibrations travel through air (and other media) to the ear. Know that different mediums such as solids, liquids and gases can carry sound but that sound cannot travel through a vacuum (an area of empty matter).

	Know that vibrations cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound. Know how to change the volume of a sound e.g. increase the size of vibrations by hitting or blowing harder. Know the loudness (volume) of the sound depends of the strength (size) of vibrations which decreases as they travel through the medium. Know that sound decreases in volume as you move away from the source. Know that a sound insulator is a material that blocks sound effectively. Know that pitch is the highness or lowness of a sound and is affected by features of objects producing the sounds. For example, smaller objects usually produce higher pitched sounds. Know that noise can be a form of pollution just as exhaust fumes can be and how it can affect the environment. **Knowledge of Working Scientifically** Know how to independently ask a range of relevant questions that will provide 'useful' results linked to a topic. Know how to choose what to measure or observe. Know how to set up simple, practical enquiries, comparative and fair tests. Know how to think of more than one variable factor. Know how to make systematic and careful observations. Know how to use notes, simple tables and standard units to present results. Know how to suggest new questions arising from the investigation. Monitor sound levels around school and possibly on Littleham Road. Do we get noise pollution in the classroom from cars or aircraft? Take musical instruments to the field and measure distance that you can still hear them. Identify how sounds are made by working scientifically.

	Find patterns in the sounds that are made by different objects such as elastic bands of different thickness. Make and play own instrument by using what they have found out about pitch and volume. Investigate a variety of materials to discover which provides the best insulation against sound. Know that sound can travel through a medium such as water or air to reach our ears and that some materials are better than others at blocking sound. Use the sound bars attached to SMART boards to show sound levels. Discuss noise pollution and visit the main road to hear the noise from the traffic. Take ear defenders to find out how much difference they make. How effective are our classroom windows at blocking sound from children in playground? Children work scientifically with a range of materials to see how well their properties help them block sound. Design and make a headband to block sound and record what they can hear. Repeat the process with a variety of materials before testing different combinations and discuss the results. Investigate creating a soundproof box using a maximum of five layers of the same or different materials to provide insulation against sound.
Art and design	The floors of Roman buildings were often richly decorated with mosaics-tiny coloured stones. Know that the Romans used mosaics to tell stories and that the remains of mosaics were found under Exeter Cathedral. Mosaics captured scenes of everyday Roman Life. Mosaic floors were statements of wealth and importance. **Pattern** Know how to create original designs for patterns using geometric repeating shapes. Know how other artists use pattern describe how this looks. Know how to create geometric compositions using mathematical shapes. Know how to analyse and describe the use of shape in artist's work.

	Create portraits or 'story' scene using mosaics. – Children to match tool to material. Choose fabric squares/paper squares to create a collage - replicate the biggest Roman mosaic found in Exeter and know that it dates from early fourth century AD. It came from a town house in what is now Catherine Street. Locate this during City visit.
Music	Identify how different types of sound are used to accompany a song. **Listen and Appraise** Know five songs from memory (links to subject topics/Christmas if possible) and who sang them or wrote them. Know the style of the five songs. Know, for one of the songs, how to talk about the musical characteristics that give the song its style. Know, for one of the songs, how to talk about the lyrics of the song. Know, for one of the songs, how to talk about any musical dimensions featured in the song and where they are used e.g. texture, dynamics, tempo, rhythm, pitch – link this to science unit on 'sound' if applicable. Know, for one of the songs, how to identify the main sections of the song e.g. introduction, verse, chorus. Know the names of some of the instruments they heard in the song. **Singing** Know that singing in a group can be called a choir. Know that the leader or conductor is the person who the choir or groups follow. Know that songs can make you feel different things e.g. happy, energetic or sad. Know that singing as part of an ensemble or large group is fun, but that you must listen to each other.

	Know why you must warm up your voice. Know how a solo singer makes a thinner texture than a large group. Know how to sing in unison and in two simple parts. Know how to demonstrate a good singing posture. Know how to follow a leader when singing. Know how to enjoy singing solo. Know how to sing with an awareness of being in tune. Know how to rejoin the song if lost. Know how to listen to the group when singing. **Improvisation** Know what improvisation is and be able to talk about improvisation. Know that improvisation is making up your own tunes on the spot. Know how to improvise using instruments in the context of the song they are learning to perform. Learn from memory 5 contrasting songs – discuss how the sounds are created (link to science), comment on their likes and dislikes and sing them to performance standard. Analyse and comment on how sounds are used to create different moods (link to science). What sounds might inspire an army and spur them on?

	Consider the sounds different percussion instruments can make, and how the sound is produced (link to science). Improvise with the instruments to make suitable accompaniments to the songs being learnt.
Computing	**Technology In Our Lives** Know what the internet is and what websites are. Know that websites use different methods to advertise products. Know that information online may not always be reliable. Know how to identify key words to use when searching safely on the World Wide Web. Know how to create a hyperlink to a resource. Evaluate websites. – what features make a 'good' website. Know how the internet works and the accuracy of websites. Know that websites may differ in the facts they discuss. Know how to stay safe when using the internet. Know who to talk to and some of the online facilities available to report concerns. Refer to "think you "know and CEOP resources. **Multimedia** Know how to use a keyboard confidently and make use of a spell checker to write and review work. Know how to use Google Classroom to give constructive feedback to others to help them improve. Know how to create, modify and present documents for a particular purpose. Know how to change the appearance of text to increase its effectiveness.

	Research an aspect of Roman life using multiple websites and evaluate results. Are they in agreement or are there differences between sites? Children to create presentation using publisher or equivalent.
Design and Technology	**Design** Know how to develop more than one design or adaptation of an initial design that would successfully fulfil the brief. Know how to propose realistic and thought through suggestions as to how they can achieve their design ideas. Know how to consider and justify aesthetic qualtities of materials chosen. **Make** Know how to use tools with accuracy and begin to use independently. Know how to select from techniques for different parts of the process. Know how to plan the stages of the making process. Know how to use appropriate finishing techniques with increasing understanding of the importance of this. **Evaluate** Know how to investigate similar products to the one to be made to give starting points for a design and begin to explain how their product will be unique (Roman Banquet research). Know how to improve products during the making process to help analyse and understand how products are made. Know how to discuss how well the finished product meets the design criteria of the user. Know how to offer constructive advice to peers and accept constructive advice in return. **Food**

	Know how to develop sensory vocabulary/knowledge using smell, taste, texture and feel. Know how to analyse the taste, texture, smell and appearance of a range of foods – predominantly savoury. Know how to follow instructions/recipes Know how to make healthy eating choices – discuss the Eatwell Plate (consider in Roman times). Know how to join and combine a range of ingredients. Know how to explore seasonality of vegetables and fruit (consider in Roman times). Know how to find out which fruit and vegetables are grown in countries/continents studied in History/Geography (within Roman Empire). Know how meat/fish are reared/caught. Key Activity – Plan, design and hold a Roman Banquet for parents or fellow pupils. Design features are the aspects of a product's design that the designer would like to emphasise, such as the use of a particular material or feature that makes the product easier to use or more durable. Know that Roman technology influenced the progress of countries they invaded, and many ideas have survived to modern day or been developed: aqueducts, toilets, roads, underfloor and central heating. Know the sorts of designs the Romans decorated items with or what pictures had significant meaning to them. Were there any symbols particularly linked to the Roman Army in Exeter? Optional Activity - Make a Roman shield out of corrugated cardboard investigating the shape and pattern of the designs. Evaluate different designs from Roman and Saxon times.

Term 1 – Autumn	
	What are the key pieces of knowledge we want children to remember, be able to build upon and to reflect on within each subject area of this topic? This knowledge or skill features heavily in sub theme or will not be repeated. **Text in this colour describes example activities to support the main theme of the topic.** **Text in this colour relates to key pieces of knowledge linked specifically to our Curriculum Intent.**
Sub-themes	**Electricity**
Science	**Discrete science teaching and learning.** Identify objects that run on electricity, both mains and battery. Construct simple series circuits. Know the names of basic components: cells, wire, lamps, switch, buzzer. Know that a complete loop is needed in a circuit for a lamp to work. Recognise that a switch can open or close and associate this with a lamp working. Know some common insulators and conductors of electricity. **Electricity** Know that many household devices and appliances run on electricity. Know that some plug into the mains and others run on batteries. Know that an electrical circuit consists of a cell or battery, connected to a component using wires. Know that if there is a break in the circuit, a loose connection or a short circuit, the component will not work. Know that a switch can be added to the circuit to turn the component on or off. Know that metals are good conductors so they can be used as wires in the circuit. Know that non-metallic solids are insulators except for graphite (pencil lead).

	Know that water, if not complete pure, conducts electricity. **Knowledge of Working Scientifically** Know how to decide what to measure or observe in order to answer a question. Know how to choose from a selection of equipment to use. Know how to identify differences, similarities or changes related to simple scientific ideas and processes. Construct simple circuits using wires, cells and lamps. Add in a simple switch to control the circuit. Draw circuits pictorially – there is no requirement to use circuit diagrams yet. (Y6) Pupils might investigate using more cells but this comes later. (It can also 'blow' the lamp causing it to break and give false information.) Pupils need to recognise how to keep safe around electrical appliances at school and home. Observe how plugs are insulated and how wires have two layers of insulation. Know what to do if they notice something wrong with any appliances at home.

Term 2 – Spring	
	What are the key pieces of knowledge we want children to remember, be able to build upon and to reflect on within each subject area of this topic? This knowledge or skill features heavily in sub theme or will not be repeated. **Text in this colour describes example activities to support the main theme of the topic.** **Text in this colour relates to key pieces of knowledge linked specifically to our Curriculum Intent.**
Subsidiary Topic	**Traders and Raiders.**
History	Learn about Britain's settlement by Anglo-Saxons and Scots. Know that in the fourth century AD the Anglo-Saxons and Scots from Ireland invaded Britain to fight and capture land and goods because the Romans had left. Anglo-Saxons also wanted to find farmland after flooding in Scandinavia. They wanted to make new homes and settlements and eventually settled in kingdoms, first across the south-east and eastern England and then across the whole country. Know that these kingdoms later became the counties of Kent, Sussex, Wessex, Middlesex and East Anglia. **Chronology** Know how to compare and contrast how some groups lived in the past compared with others. Know how to explain religious change in England and give possible reasons. Know how to explain how different cultural beliefs impacted on key aspects of life such as buildings. Know how to explain where common modern misconceptions can come from i.e. Vikings wearing horns on helmets. Know how to explain the significance of some royal struggles. **Historical Enquiry**

	Know how to interpret primary sources of history with some independence. Know how to make judgements about what primary sources tell us about life during periods studied and begin to consider bias. Know how to begin to independently combine the use of a range of primary and secondary sources to construct layouts of buildings. Know how to use evidence to make a judgement about achievements. **Interpretations of History** Know how to explain why some people living during the studied period had different viewpoints. Know how to decide upon and justify whether they think a significant character was great. **Continuity and Change** Know how to compare and contrast the homes of people from two groups of people who followed each other chronologically (understand how people lived depended on the culture of their own lands and not the land they were coming to). **Cause and Consequence** Make a judgement on the impact of harsh treatment on a group of people/population. **Similarities and Differences** Know how to explain with evidence how some wealthy classes in some civilisations have sought to influence lower classes. Know how to evaluate how Christianity impacted upon ordinary people compared with Lords and noblemen. **Significance** Know how to explain why a historical period is considered significant.

	Know why some battles have become significant in the view of English historians. Research groups from AD 600 onwards. Explain the cause, consequence and impact of invasion and settlement in Britain. When the Romans were in Exeter, the newly founded town thrived and became a centre of trade and industry in the Southwest. The Empire later fell in the 400's AD. Later came the Saxon King Alfred the Great who set-up work in the city and established Exeter as one of the most active and large cities of the century. Look closely at the Roman walls in Northernhay gardens and you will see reconstruction by the Saxons. The Roman wall played a large part in Medieval times e.g. it held out the Vikings who arrived in 1001AD and even restricted an attack by William the Conqueror in 1086 when he tried to claim Exeter.
Science	Describe functions of basic parts of digestive system. Identify different types of teeth in humans. **Animals Including Humans** Know that food enters the body through the mouth. Know that digestion starts when the teeth start to break the food down. Know that saliva is added and that the tongue rolls the food into a ball. Know that food is swallowed and passes down the oesophagus to the stomach. Know that in the stomach food is broken down further by being churned around and that other chemicals are added. Know that food passes into the small intestine and that nutrients are removed from the food and leave the digestive system to be used elsewhere in the body. Know that the rest of the food then passes into the large intestine and that the water is removed to be used elsewhere in the body.

	Know that what is left is then stored in the rectum until it leaves the body through the anus when you go to the toilet. Know why humans have four types of teeth. Know that the incisors are for cutting, the canines are for tearing and the molars and premolars are used for grinding (chewing). Know what these different types of teeth look like and talk about their shape. Know that living things can be classified as producers, predators and prey according to their place on the food chain. Know that producers are living things that make their own food through photosynthesis (plants). Know that predators are animals which capture and eat other animals. Know that prey are animals which are captured by another for food. Know that the death of one of the parts of a food chain or web has consequences on the rest of the chain. Know that the arrows in a food chain mean 'eats'. **Knowledge of Working Scientifically** Know how to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations and choose a source from a range provided. Know how to independently ask a range of relevant questions that will provide 'useful' results linked to a topic. Know how to decide what data to collect to identify naturally occurring patterns and relationships. Know how to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. Know what was found out linking cause to effect.

	Know how to use straightforward scientific evidence or answer questions to support findings. Know how to suggest new questions arising from the investigation. Look at our mouths and describe the teeth. Use the big mouth and discuss functions of teeth. Move onto discuss digestion using biscuits and milk to show how food gets broken down- ready for digestion. Label basic parts of digestive system. Discuss importance of brushing teeth and visiting the dentist. Get school nurse/dental assistant in to discuss healthy teeth. Talk about healthy diet and importance of eating healthy food to get energy and vitamins to help us grow.
Music	Composers of 20th century music worked from 1901 to 2000. Many compositions of this era don't follow the conventions of music that were used in previous periods. For example, some composers used objects in their music as well as conventional instruments and some created music without harmonies or melodies. **Listen and Appraise** Know and describe some of the style indicators of a piece of music. Know and describe any musical dimensions featured in a piece of music and where they are used e.g. texture, dynamics, tempo, rhythm and pitch. Know how to name some of the instruments they hear in a piece of music. Know how to confidently identify and move to the pulse. Know how to talk about the music and how it makes them feel. Know how to carefully and respectfully listen to other people's thoughts about the music. Know how to use musical words when talking about the pieces.

	Dimensions of Music Know and be able to talk about how pulse, rhythm and pitch work together. Know how to find the pulse – the heartbeat of the music. Know what the rhythm is – the long and short patterns over the pulse. Know the difference between pulse and rhythm. Know that pitch is the high and low sounds that create melodies. Know how to find the pulse. Know how to clap and say back rhythms. Know how to listen and sing back pitch and vocal warm ups. Know how to create own simple rhythm patterns on percussion instruments, and copy back those of others. Using the list of composers : Stravinsky (Firebird), Britten (Young Person's Guide to the Orchestra), Copland, Prokofiev (Peter and the Wolf), Julia Perry, Laura Pettigrew. Can we listen, evaluate ,talk about and devise a likes and dislikes chart that celebrates their style and what makes them unique? Know about well-known and lesser-known composers of the 20th Century and build up a bank of names and pieces of music to evaluate. Know that people still compose music today: films, pop bands. Listen to a variety of music from 20th century composers: Stravinsky (Firebird), Britten (Young Person's Guide to the Orchestra), Copland, Prokofiev (Peter and the Wolf), Julia Perry, Laura Pettigrew. Listen to iconic scores from films: Star Wars, Indiana Jones, 2001. Listen to music and take "your pen for a walk" as you do so. Model this to children showing how we might change colour of pen in response to the mood of the music, may have straight lines for a long steady note or swirls to indicate moving from low pitch to high or quicker pulse.

Term 2 – Spring	
What are the key pieces of information we want children to remember and be able to build upon and reflect on within each subject area of this topic? **Text in this colour relates to key pieces of knowledge linked specifically to our Curriculum Intent.** **Text in this colour describes example activities to support the main theme of the topic.**	
Main Topic	**1066**
History	Children to know the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed. Examples include; The Domesday Book and how it was created after the Norman invasion and conquest of England in 1066, the **Domesday Book** was commissioned in December 1085 by order of William The Conqueror. William needed to raise taxes to pay for his army and so a survey was set in motion to assess the wealth and assets of his subjects throughout the land. **Chronology** Know how to compare and contrast how some groups lived in the past compared with others. Know how to explain religious change in England and give possible reasons. Know how to explain how different cultural beliefs impacted on key aspects of life such as buildings. Know how to explain the significance of some Royal struggles (1066). **Historical Enquiry** Know how to interpret primary sources of history with some independence (e.g. Domesday Book). Know how to make judgements about what primary sources tell us about life during periods studied and begin to consider bias.

	Know to how to begin to independently combine the use of a range of primary and secondary sources to construct plans and layouts of buildings (e.g. Domesday Book). Know what place names can tell us about physical landscapes and the people who lived there. Know how to use evidence to make a judgement about achievements. **Interpretations of History** Know how to explain why some people who lived during the studied period had different view points. Know how to make reasoned arguments for what may have been in private correspondence based on following actions. Know how to decide upon, and justify, whether they think a significant character was great. **Continuity and Change** Know how to compare and contrast the homes of people from two groups of people who followed each other chronologically. (Understand how people lived depended on the culture of their own lands and not the land they were coming to). **Cause and Consequence** Know how to make a judgement on the impact of harsh treatment on a group of people/population. **Similarities and Differences** Know how to explain with evidence how some wealthy classes in some civilisations have sought to influence lower classes. Know how to evaluate how Christianity impacted upon ordinary people compared with Lords and noblemen. **Significance** Know how to explain why a taught historical period is considered significant.

	Know how to explain why some battles have become significant in the view of English historians. Littleham is an old Saxon settlement established before the Norman Conquest, and Littleham is mentioned in the Domesday book. Research the origins of Saxon and Norman place names and Littleham in the Domesday book. What would be included now? Can children create a large map and key / glossary?
Geography	Know that fieldwork techniques, such as sketch maps, data collection and digital technologies, can provide evidence to support and answer a geographical hypothesis through the following activity. **Human Features** Know how human activity has impacted and/or changed the human characteristics of a place in UK. **Skills, Maps Work and Fieldwork** Know how to link words to topic e.g. contour, height, valley. Know how to analyse evidence and draw conclusions between locations using photos, pictures and maps. Know how to collect and record evidence: show questionnaire results in simple charts or colour coded maps which demonstrate patterns. Know how to collect and analyse data from first and second hand sources, identifying and analysing patterns and suggesting reasons for them. Know how to suggest which source material to use for a specific task, locating the information needed. Know how to draw sketch maps and plans using standardised symbols and key. Know how to locate and name geographical features on an Ordnance Survey map. Work in small groups or pairs to search Ordnance Survey and online maps of the local area, to identify good and bad places for building a castle and explain why. Present their ideas to others in the class to make comparisons between different groups and pairs. Together, draw

	conclusions on the ideal spot for a castle in the local area. Alternatively, take a walk around the local area to identify where they would build a castle, taking photographs of possible sites. Use these to create a display about where to build a castle, with labels and captions. Know some of the location of Norman Castles in Devon and why they were built where they were such as one of the oldest castles in Devon that is now a crumbling ruin in glorious woodland. Okehampton is a Medieval motte and bailey castle that was built between 1068 and 1086 following a revolt in Devon against Norman rule. Although referred to as a castle, Powderham is technically a fortified manor house as it lacks a keep and a moat. The land where Berry Pomeroy castle is situated was originally given by William the Conqueror to Ralph de Pomeroy in the 11th century as a reward for his support and loyalty during the Norman invasion and the Battle of Hastings. Children to make comparisons between Okehampton and Powderham Castle. How are they different? What similarities do they have in terms of location? Powderham is situated by the Exe Estuary while Okehampton is within woodland and overlooks the surrounding area. Consider advantages of building a castle in these areas. Children to present this in teams and conclude with where in Devon they would build a castle today and why. Look at locations of Norman castles in Devon: Totnes (Motte and Bailey), Tiverton Castle and Berry Pomeroy castle in south Devon. Children to search why these locations were chosen to build a castle and settlement? Use google search and OS map.
Science	Know that there are three states of matter: solid, liquid and gas and know that materials can move between these states usually when they are cooled. For example, liquid water turns into steam when it is heated enough, and it turns into ice when it is cooled enough. Know the importance of the water cycle in our weather systems. The water cycle is the path that all water follows as it moves around Earth in different states. ... water vapor—a gas—is found in Earth's atmosphere. Water can be found all over Earth in the ocean, on land and in the atmosphere. The water cycle is the path that all water follows as it moves around our planet. **States of Matter** Know that a solid keeps its shape and has a fixed volume. Know that a liquid has a fixed volume but changes its shape to fit the container. Know that a liquid can be poured and keeps a level horizontal surface.

	Know that a gas fills all available space, it has not got a fixed shape nor volume. Know that granular, powdery solids like sand can be confused with liquids because they can be poured, but when poured they form a heap and they do not keep a level surface when tipped. Know that each individual grain of a granular powdery solid demonstrates the properties of a solid. Know that melting is a state change from solid to liquid. Know that freezing is a state change from liquid to solid. Know that the freezing point of water is 0 degrees C. Know that boiling is a change of state from liquid to gas that happens when a liquid is heated to a specific temperature and bubbles of the gas can be seen in the liquid. Know that water boils when it is heated to 100 degrees C. Know that evaporation is the same state change as boiling (liquid to gas), but it happens quickly if the temperature is higher, the liquid is spread out, or it is windy. Know that condensation is the change back from a gas to a liquid caused by cooling. Know that water at the surface of seas, rivers etc evaporates into water vapour (a gas). Know that this rises and cools and condenses back into a liquid forming clouds. Know that when too much water has condensed, the water droplets in the cloud get too heavy and fall back down as rain, snow, sleet etc. and drain back into rivers etc. This is known as precipitation. This is the water cycle. **Knowledge of Working Scientifically** Know how to independently ask a range of relevant questions that will provide 'useful' results linked to a topic.

	Know how to think of more than one variable factor. Know how to be able to put appropriate headings onto Carroll diagrams. Know how to make systematic and careful observations. Know how to decide what data to collect to identify naturally occurring patterns and relationships. Know how to choose what to measure or observe. Know how to set up simple practical enquiries, comparative and fair tests. Know how to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. Know how to use notes, simple tables and standard units to present results. Know how to look for changes, patterns, similarities and differences in their data in order to identify new questions arising from the data, making new predictions. Know how to say what was found out, linking cause to effect. Use the school grounds to set up water cycle experiments in different places and at different times. How does this affect our allotment? Children set up the following experiments: 1. Place a mug in the centre of bowl. Fill bowl two thirds with water. No water inside the cup. Cover bowl with cling film and secure with elastic band. Place outside in sunny area for a few hours. After several hours, allow pupils to observe the bowl. The plastic wrap will have condensation and some of the condensation will have dripped or fallen into the cup/mug. This experiment demonstrates the heat of the sun turning the water in the bowl to vapor (evaporation). The vapor turning back to water droplets on the wrap (condensation), drops getting too heavy and falling back down (precipitation) to the water in the bowl or in the mug which represents mountains or land (collection). After the experiment check students' understanding of the water cycle, vocabulary and how the experiment demonstrated each stage of the water cycle by asking them to label a picture of the experiment.

	2. If desired, draw water, a cloud, and a sun on a Ziploc plastic bag with a marker. Add a small amount of water to the bag without getting the sides wet. Add a few drops of blue food colouring to the water. Hang on a sunny window for several hours. After several hours or when heavy condensation appears on the bag, remove the bag and allow pupils to observe. Tap the bag, if necessary, to make the water droplets fall. This experiment allows pupils to observe the water from the bag evaporating, condensing, falling like precipitation, and collecting again at the bottom. Notice that the water does not stay blue once it evaporates. This is because the food colouring is heavier than the water vapor and thus stays down, much like the salt from the ocean water. After the experiment, check students' understanding by having them draw and label a picture of the experiment using the water cycle vocabulary words or use Pic Collage or Pic Kids to insert a photo of the experiment and label it with the text feature. 3. Place approximately 3 tablespoons of water in a small glass and add about 10 drops of blue food colouring. Fill the medium glass with water. Add 1-3 inches of shaving cream to the top. The more shaving cream used the longer the experiment will last. Add the coloured water to the shaving cream drop by drop using an eye dropper or by dipping the straw in the coloured water, placing your finger over the end, holding it over the shaving cream, and lifting your finger enough to allow drops of coloured water to drip onto the shaving cream. Continue dropping the water onto the shaving cream until you observe it getting too heavy and "rain" starting to come out below. Depending on the amount of shaving cream used, this could take anywhere from 40-100 drops. This experiment demonstrates what happens in the clouds during the water cycle. When a cloud accumulates too many water droplets they fall in the form of precipitation. In the experiment, after a certain point the shaving cream can no longer absorb the water drops and gravity pulls them down into the water. Optional: Prior to dropping the water in the shaving cream cloud, ask pupils to predict how many drops of water they think the cloud will hold before it starts to "rain" and have them record it. During the experiment, count the number of drops and compare it to pupil guesses. After the experiment ask pupils to draw and explain what they learned. Use the playground to observe evaporation of water. Leave water in the poly tunnel and observe condensation on the inside. Set up investigations to evaporate water under different conditions. Observe and discuss what is happening using correct scientific vocabulary.
Art and design	**Use of Sketchbook** Know how to use their sketchbooks to adapt and improve their original ideas. Know how to use their sketchbooks to show knowledge and art history they have learnt.

	Know that there are different types of stitches including running stitch, cross stitch and blanket stitch. Know that we can repair clothing by stitching and adjusting rather than throw it away, helping the environment. **Drawing** Know how to use line, tone, scale, texture and depth and demonstrate in their pieces. Know how to use mirrors, viewfinders, magnifying glasses to aid observations. Know and feel confident with showing facial expressions and body language in their drawings. Know how to be able to draw for a sustained period of time (30 mins). **Textiles** Know that you can join fabrics or create designs using a variety of stitches including – running stitch, back stitch, cross stitch, blanket stitch. Know that the Bayeux Tapestry tells the epic story, in wool thread embroidered on linen cloth, of William, Duke of Normandy who became King of England in 1066 after the Battle of Hastings. Know that The Exeter Rondels take the form of a series of embroidered cushions, over seventy metres in length, lining the sides of the nave in Exeter Cathedral. Greater in length than the famous tapestry at Bayeux, The Exeter Rondels form a chronological story of national, local and church history. Visitors walking through the nave will follow the main events of the past, told through the words and pictures interwoven on the Rondels. Every monarch is recorded along with the Deans and Bishops of Exeter (up until 1989) together with their dates. Battles, coronations and great events of British history are all revealed through a richly-coloured tapestry of over 14 million individual stitches. Draw their own simple scene from the story in the Bayeux Tapestry, or a piece of recent news, in the style of the Bayeux Tapestry. Design how this can be recreated on Binca. Practise the stiches listed above and use them to create a mini Bayeux Tapestry.

Littleham CE Primary School Year 4 Rolling Programme

Music	**Improvisation** Know that improvisation is making up your own tunes on the sport. Know that when someone improvises they make up their own tune that has never been heard before. It is not written down and belongs to them. Know that using one or two notes confidently is better than using five. Know that if you improvise using the notes you are given, you cannot make a mistake. Know that you can use some of the riffs you may have heard, in your improvisations. Know how to improvise using instruments within the theme of the piece of music. Know how to listen and sing back melodic patterns using instruments. Know how to take it in turns to improvise using one note. Know how to listen and copy back using instruments, using two different notes. Know how to take it in turns to improvise using one or two notes. Children create their own improvisations using classroom tuned instruments and percussion to accompany a chosen scene from the Bayeux Tapestry.
Computing	Know how to 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. Know how to collect data and identify where it could be inaccurate.

	Know how to plan, create and search a database to answer questions. Know how to organise data in different ways. Know how to justify choices that have been made when presenting data in a certain way, explaining the effectiveness of the choice that has been made. Children to achieve this as they progress through the water cycle science experiments. Know how to use the internet safely to research Norman Castles and how to use Publisher. Look at English Heritage guides to places. Produce a Guide to Totnes Castle for example creating a booklet using Publisher. (Link English – persuasive text)
Design and Technology	Mechanisms can be used to add functionality to a model. For example, sliders or levers can be used in moving pictures, storybooks or simple puppets; 3-D moving toys or pictures. **Design** Know how to develop more than one design or adaptation of an initial design that would successfully fulfil the brief. Know how to begin to use exploded diagrams. Know the importance of and use prototypes to develop and share ideas. Know how to think ahead about the order of their work and decide upon tools and materials considering limitations of time and availability. Know how to propose realistic and thought through suggestions as to how they can achieve their design ideas. **Make** Know how to prepare pattern pieces as templates for their design.

	Know how to cut internal shapes with growing precision and understand that it will impact on the quality of the finish. Know how to justify selection from a range of tools for cutting, shaping, joining and finishing. Know how to use tools with accuracy and being to use them independently. Know how to select from techniques for different parts of the process. Know how to select from materials according to their functional properties with growing independence. Know how to plan the stages of the making process. Know how to use appropriate finishing techniques with increasing understanding of the importance of this. **Evaluate** Know how to research the needs of the user and understand its vital importance to the manufacturing process. Know how to draw/sketch products to help analyse and understand how products are made. Know how to improve products during the making process in response to feedback. Know how to discuss how well the finished product meets the design criteria of the user. **Mechanical and Electrical Systems** Know how to develop vocabulary related to the project. Know how to use mechanical systems such as gears, pulleys, levers and linkages. Know how to incorporate a circuit into a model. Know how to use systems such as switches, bulbs and buzzers.

	Know how to use sticks/card to make levers and linkages. Know how to use ICT to control products. Create early Motte and Bailey castles in the grounds using natural materials. Using the example of the pop-up Castle book with its flaps, moving images and sounds children to design and recreate their own one or two pages of a pop-up book depicting an element of castle life. The page should include mechanical systems e.g. levers, and a circuit to create a light or buzzer.

Term 2 – Spring	
	What are the key pieces of knowledge we want children to remember, be able to build upon and to reflect on within each subject area of this topic? This knowledge or skill features heavily in sub theme or will not be repeated. **Text in this colour describes example activities to support the main theme of the topic.** **Text in this colour relates to key pieces of knowledge linked specifically to our Curriculum Intent.**
Sub-themes	**Are all liquids runny?**
Science	**Discrete science teaching and learning (linked to main science theme).** Know that heating or cooling materials can bring about a change of state. This change of state can be reversible or irreversible. The temperature at which materials change state varies depending on the material. Water changes state from solid (ice) ⇌ liquid (water) at 0°C and from liquid (water) ⇌ gas (water vapour) at 100°C. The process of changing from a solid to liquid is called melting. The reverse process of changing from a liquid to a solid is called freezing. The process of changing from a liquid to a gas is called evaporation. The reverse process of changing from a gas to a liquid is called condensation.

	States of Matter Know that a solid keeps its shape and has a fixed volume. Know that a liquid has a fixed volume but changes its shape to fit the container. Know that a liquid can be poured and keeps a level horizontal surface. Know that a gas fills all available space, it has not got a fixed shape nor volume. Know that melting is a state change from solid to liquid. Know that freezing is a state change from liquid to solid. Know that the freezing point of water is 0 degrees C. Know that boiling is a change of state from liquid to gas that happens when a liquid is heated to a specific temperature and bubbles of the gas can be seen in the liquid. Know that water boils when it is heated to 100 degrees C. Know that evaporation is the same state change as boiling (liquid to gas), but it happens quickly if the temperature is higher, the liquid is spread out, or it is windy. Know that condensation is the change back from a gas to a liquid caused by cooling. Know that water at the surface of seas, rivers etc evaporates into water vapour (a gas). Know that this rises and cools and condenses back into a liquid forming clouds. Know that when too much water has condensed, the water droplets in the cloud get too heavy and fall back down as rain, snow, sleet etc. and drain back into rivers etc. This is known as precipitation. This is the water cycle.

	Knowledge of Working Scientifically Know how to independently ask a range of relevant questions that will provide 'useful' results linked to a topic. Know how to think of more than one variable factor. Know how to be able to put appropriate headings onto Carroll diagrams. Know how to make systematic and careful observations. Know how to decide what data to collect to identify naturally occurring patterns and relationships. Know how to choose what to measure or observe. Know how to set up simple practical enquiries, comparative and fair tests. Know how to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. Know how to use notes, simple tables and standard units to present results. Know how to look for changes, patterns, similarities and differences in their data in order to identify new questions arising from the data, making new predictions. Know how to say what was found out, linking cause to effect. Children investigate the properties of liquids and how they can have different viscosities. They should observe water as a liquid, a solid and a gas and explain the changes to water when it is heated and cooled. Research the temperature in degrees Celsius at which materials change state. Experience a range of liquids found in the house: treacle, washing up liquid, oil, water, syrup, tomato sauce. Pour them out onto a tray, cool or warm and observe. Try dropping objects into a beaker of different liquids.

Term 3 – Summer	
What are the key pieces of information we want children to remember and be able to build upon and reflect on within each subject area of this topic? **Text in this colour relates to key pieces of knowledge linked specifically to our Curriculum Intent.** **Text in this colour describes example activities to support the main theme of the topic.**	
Main Topic	**Blue Abyss**
History	Know about historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically valid questions and create their own structured accounts, including written narratives and analyses. HMS Challenger expedition took place between 1872 and 1876. It was the first expedition organised specifically to gather data on a wide range of Ocean features including temperature and marine life. HMS Challenger's work means that deepest parts of the ocean are no longer hidden. **Chronology** Know how to explain factors that can lead to a cultural shift – e.g. industrial revolution Know how to plot significant events on a timeline. Know why what is being studied is important to that time. **Continuity and Change** Know how to compare and contrast sea exploration and marine science before and after the time of HMS Challenger.

	Cause and Consequence Know how to describe the likely impact that HMS Challenger's work has had on marine life. **Similarities and Differences** Know how to compare and contrast the HMS Challenger expedition with other scientific ocean expeditions. Compare with e.g. RRS Sir David Attenborough. **Significance** Know why historians and marine scientists consider this historical expedition to be significant. Watch video Clip on dive and discover. Children also explore materials from the National Science Foundation. Children to write a short script/ create dramatization of the first voyage to the abyss. Show children a picture of the 1872 Royal Navy ship, *HMS Challenger* along with some key facts listed on the dive discover website as to why it is considered so important and how its story has contributed to modern oceanography, for example the number of new species of animals and plants discovered is 4,700. (https://divediscover.whoi.edu/history-of-oceanography/the-challenger-expedition/) Children to be given a pack of 'facts and fakes'. Bearing in mind what they know and on seeing the picture children are to sort the statements and discuss their rational.
Geography	Know that Earth is divided into hemispheres by the equator and that the tropics lie between the Tropics of Cancer (N) and Capricorn (S). Know that latitude is used to define regions N and S of the equator and longitude E and W of the prime meridian. The planet can be divided up in to climate zones. **Locational Knowledge** Know the areas of origin of the main ethnic groups of the UK and in our school. Know how the climate of a country or continent is linked to the distribution of natural resources and tourism. Know how to locate the Tropic of Cancer and the Tropic of Capricorn.

	Know and locate major world jungles and deserts e.g. Antarctica, Arctic, Sahara, Arabian, Gobi, Kalahari deserts and rainforests of Borneo, Amazon, India, Sri Lanka and West Africa. **Human Features** Know how physical activity has impacted and/or changed the human characteristics of a place in the world. Know how people try to sustain environments. Know how to describe how physical processes have changed the characteristics of a landscape, country or continent and how it can affect the lives and activities of the people living there. Know how to compare and contrast how areas of the world have capitalised on their physical and human features. **Physical Features** Know how to ask questions like – what is this landscape like?, what will it be like in the future? Know how to describe how physical activity has changed the physical characteristics of a place in the world. Know how to compare and contrast how areas of the world have capitalised on their physical and human features. Know and understand the concept of biomes and climate zones. Know how to understand the concept of vegetation belts. **Skills, Maps Work and Fieldwork** Know how to describe route and direction linking N/S/E/W with degress on the compass. Know how to link words to topic e.g. contour, height, valley Know how to identify and explain different views of people including themselves.

	Know how to collect and analyse data from first and second hand sources, identifying and analysing patterns and suggesting reasons for them. Know how to suggest which source material to use for a specific task, loc Know how to suggest where in the world an aerial photo or satellite image shows, explaining reasons for their suggestions. Know how to draw an accurate map – develop more complex key, use contents/index to locate position of location including page/co-ordinates. Know how to draw sketch maps and plans using standardised symbols and key. Know how to locate and name geographical features on an Ordnance Survey map. Know how to plot a route on a map or a globe, from one place or another, identifying countries or significant landmarks that are passed. Know how to locate and explain the significance of the Equator, Northern Hemisphere, Southern Hemisphere, The Tropics of Cancer and Capricorn to a range of countries across the world. Use an atlas to locate the imaginary lines dividing the world. Look at climate zones in the tropics and compare to UK. Share with children clips of the weather forecast from different times of the year in the UK but also clips from different climate zones. Children use a world climate zone map to do a very brief weather forecast / summary of the weather in this zone. Groups of children then investigate a focus Zone and prepare a weather forecast to share with peers. Children also rotate roles of camera person as they film and direct the clip. The Jurassic Coast is a World Heritage Site and stretches from Exmouth to Studland Bay in Dorset – that's 96 miles.
Science	Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams. Living organisms can be grouped in a variety of ways. Explore and use classification keys. Environments can change. Construct and interpret food chains. **Living Things and Their Habitats** Know that living things can be grouped (classified) in different ways according to their features.

	Know the names of living things living in a range of habitats giving the key features that helped them to identify them. Know how classification keys can be used to identify and name living things. Know that living things live in a habitat which provides an environment to which they are suited. Know that these environments may change naturally e.g. through flooding, fire and earthquakes. Know that humans can also cause the environment to change in a positive way, such as setting up nature reserves or in a negative way, such as littering. Know these environments also change with the seasons and that different living things can be found in a different habitat at different times of the year. **Knowledge of Working Scientifically** Know how to be able to ask a range of yes/no questions, which work together, to aid sorting. Know how to be able to put appropriate headings onto Carroll diagrams. Know how to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations and choose a source from a provided range. Know how to begin to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations. Know how to decide what data to collect to identify naturally occurring patterns and relationships. Display data about living organisms found around our local environments using tables and charts. Example – number of insects, molluscs and spiders found in different habitats. Group organisms found at our beaches into those found in the shallow water and those on the sand. E.g. Lugworms are deep down in the sand and can be found by using a spade to dig.

	Know that our school grounds and local environment (beach, sea and common) support a great variety of living organisms in different habitats. What can be found off the coast of Exmouth?
Art and design	Know that art takes a great many forms from drawing to painting, installation to sculpture. **Use of Sketchbook** Know how to use their sketchbooks to adapt and improve their original ideas. Know how to write notes about the purpose of their work. **Collage and Textiles** Know how to cut more complex shapes accurately. Know the difference between positive and negative imagery and how to use it in own pieces. Know different types of textiles. Know that I can attach fabrics in different ways. Know that folding and dipping fabric in different ways will produce different dyed effects. Know what dip-dye is and how to apply this onto material. Know how rotation and reflection can be used to improve aesthetics. Know that I can use mixed-media to create a piece. **Texture** Know how to express complex textures using a range of materials.

	Create textile designs of sea creatures from around our coastline or from tropics. Create a class aquarium of these. Pupils work together to create a class wall hanging of an ocean environment. Pupils each make their own element of the hanging – decorating it with mixed media e.g. buttons, sequins, pieces of fabric etc and then use different methods to join their piece to the whole hanging. Look at a range of seascape paintings from local artists as well as traditional artists. **Painting** Know how to use tone in monochrome (shades of one colour) and practise this. Know how to make paintings with background, foreground and middle ground and practise. Know how to create moods in their paintings and develop this. Know how to use shading in their painting to create feelings and explore this. Know how to and mix different thicknesses of paints. Know how to mix and match colours for purposes (e.g. sea colours) and experiment in their own work. **Colour** Know how to analyse and describe colour and painting techniques in artists' work. **Texture** Know how to analyse and describe texture within artists' work. **Tone** Know and use a variety of tones to create different effects. Know how to create 3D effects using tone.

	Whilst on a trip to Exmouth seafront take photos of the view from the seawall which can be used as inspiration for a seascape painting in the style of one of the artists they have researched.
Music	Use and understand staff and other musical notations. **Composition** Know that a composition is music that is created by you and kept in some way. Know that composition is like writing a story. Know that compositions can be played or performed again to others. Know that there are different ways of recording compositions – letter names, symbols, audio etc. Know how to create at least one simple melody using 1,3 or 5 different notes. Know how to plan and create a section of music that can be recorded using notation and performed within the context of the theme. Know how to talk about how the music was created. Know how to listen and reflect upon the developing composition and make musical decisions about pulse, rhythm, pitch, dynamics and tempo. Know how to record the composition in any way appropriate that recognises the connection between sound and symbol (e.g. graphic/pictorial notation) **Playing** Know and be able to talk about the instruments used in class e.g. recorder, xylophone.

	Know and be able to talk about other instruments they might play or be played in a band or orchestra or by their friends. Know how to treat instruments with care and respect. Know how to rehearse and perform their part within the context of group composition. Know how to listen and follow musical instructions from a leader. **Dimensions of Music** Know, and be able to make appropriate choices for the musical dimensions in an Ocean Composition in relation to pulse, rhythm, pitch, texture, instrument choice. In small groups pupils create a composition based on the theme of the ocean. They use musical notation to record it – beginning to use staff notation. They then play their compositions to an audience.
Computing	Know simple terminology concerned with programming. (Scratch – sprite, backdrop, block, coding, script) Know how to use programming to move sprites on a screen. Know the correct terminology for Scratch. For example; "Atomic" meaning the ability for custom blocks to run without screen refresh, BYOB meaning a commonly used acronym for the Scratch Modification Build Your Own Blocks, Duplicate — to copy and create another, Simulation -A kind of project which attempts to recreate or model a real-life circumstance, such as a simulation of balls bouncing. **Programming** Know how to use an efficient procedure to simplify a program. Know that programs need to be constantly tested while being built and that debugging is a continual process throughout the programming stage. Know a variety of tools to create a program.

	Know how to recognise an error in a program and debug it effectively, talking about the corrective actions taken. Use Scratch to make a submarine move on a background – story animation. Success criteria to evaluate if children are able to use logical thinking to solve an open-ended problem by breaking it in to smaller parts. Were children able to keep testing a programme while putting it together.
Design and Technology	Know how key events and individuals in design and technology have helped shape the world. Inventions that changed the world a decade at a time. Link to HMS Challenger expedition and the science it discovered. **Design** Know how to develop more than one design or adaptation of an initial design that would successfully fultil the brief. Know how to begin to develop cross sectional diagrams. Know the importance of, and use prototypes to develop and share ideas. **Make** Know. How to select from materials according to their functional properties with growing independence. Know how to plan the stages of the making process. **Evaluate** Know how to research the needs of the user and understand its vital importance to the manufacturing process. Know how to investigate similar products to the one to be made to give starting points for a design and begin to explain how their product will be unique.

	Know how to draw/sketch products to help analyse and understand how products are made. Know how to investigate key events and individuals in Design and Technology. Know how to be able to offer constructive advice to peers and accept constructive advice in return. Using the book "Invent" children explore in groups the invention of the motor car, locomotive, T.V., washing machine, hoover and internet. Children present their inventions to the class sharing key facts such as date and inventors name. End of activity vote for the invention that they think changed the world the most. What is the best invention of all time in their opinion? Why? Know that inventions have come about through necessity and that resilience is needed to strive to attain the final outcome. Aspirations are needed and that many inventions take time to achieve. Inventions mightn't always be technological. For example, children listen to the story of how penicillin was discovered as a result of necessity it has become a world-wide medicine – relate to Covid Vaccination invention too. Consider simple problems they may encounter when visiting the beach e.g. sand getting in eyes, seaweed getting caught in your feet as your swim, seagulls swooping to eat your chips. Children create their own 'invent' booklet with design ideas for their chosen problem. They can then create a prototype using available resources.

Purple – Key knowledge linked to our Curriculum Intent.

Green – Suggested activities