Extreme Earth – Coasts

Goldcrest

	Key Skills Covered	Milestones Covered	Lesson Outline/ Continuous Provision Activities
History	1. Investigate and interpret the past	• Use sources of evidence to deduce information about the past. • Select suitable sources of evidence, giving reasons for choices. • Use sources of information to form testable hypotheses about the past. • Seek out and analyse a wide range of evidence in order to justify claims about the past. • Understand that no single source of evidence gives the full answer to questions about the past. • Refine lines of enquiry as appropriate.	Week 3. To consider the effect of the Atlantic Ocean on Ireland, Cornwall, Devon and Dorset. Week 4. To look historically at Britain's changing coastline over decades and the impact on roads, rail, people and homes. Week 5. What is meant by the term Jurassic Coast and what evidence exists to prove the definition?
	2. Build an overview of world history	• Compare some of the times studied with those of the other areas of interest around the world. • Describe the social, ethnic, cultural or religious diversity of past society. • Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children.	
	3. Understand chronology	• Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural). • Identify periods of rapid change in history and contrast them with	

		times of relatively little change. • Understand the concepts of continuity and change over time, representing them, along with evidence, on a time line. • Use dates and terms accurately in describing events.	

	4. Communicate historically	• Use appropriate historical vocabulary to communicate, including:
		  • dates
		  • time period
		  • era
		  • chronology
		  • continuity
		  • change
		  • century
		  • decade
		  • legacy.
		• Use literacy, numeracy and computing skills to an exceptional standard in order to communicate information about the past.
		• Use original ways to present information and ideas.	

Geography	1. Investigate places	• Collect and analyse statistics and other information in order to draw clear conclusions about locations. • Identify and describe how the physical features affect the human activity within a location. • Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location. • Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways.	Week 1 - To name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time in the context of coastal features.

		• Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map). • Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.	Week 2 - What physical features and landscapes are found at the coast and how do humans use and impact upon this environment? Week 3 - To describe how a wave is formed, introduce the terms swash, backwash and 'fetch' and consider how waves a formed over long stretches of sea and how they are effected by wind strength. Consider where in the UK you might find strong waves vs. gentle waves. How does sediment move around the UK? I explain how longshore drift contributes to the movement of sediment around the UK. Week 4 - To identify the 4 main types of coastal erosion: hydraulic, attrition, abrasion and solution. Week 5 - To describe the location of the Jurassic Coast and the erosional processes that shape the coastline, to explain the formation of landforms found along the Jurassic coast and investigate why some areas are eroding more quickly than others. Week 6 – To discover the two different types of coastal engineering: hard and soft.
	2. Investigate patterns	• Describe how locations around the world are changing and explain some of the reasons for change. • Describe geographical diversity across the world. • Describe how countries and geographical regions are interconnected and interdependent.	
	3. Communicate geographically	• human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies. • Create maps of locations identifying patterns (such as: land use, climate zones, population densities, height of land).	
Art	1. Develop ideas	• Develop and imaginatively extend ideas from starting points throughout the curriculum. • Collect information, sketches and resources and present ideas imaginatively in a sketch book.	Week 1. Use a range of sketching skills to create black and white drawings of parts of the British coastline. Through these observation drawings can you list the coastal features drawn? Week 2. Use watercolours to create a

		• Use the qualities of materials to enhance ideas. • Spot the potential in unexpected results as work progresses. • Comment on artworks with a fluent grasp of visual language.	coastal landscape. Follow instructions on the watercolour tutorial to learn new skills to get the best effects. Week 3. To learn the techniques that Marcus Sedgwick has used, creating wood engravings in the same style as the ones in the novel Floodland, looking at the work of illustrator and wood engraver John Lawrence to broaden experiences. Supporting resources can be found here: http://www.illustrationcupboard.com/artist.aspx?aId=66 Week 4. Focus on the art work of William Blake and create a copy of your chosen work. Supporting resources can be found here: http://www.tate.org.uk/art/artists/william-blake-39. Week 5. Plan and start to gather resources to create a 3D model of a coastline Week 6. Create a 3D model of a coastline.
	2. Master techniques	• Sketch (lightly) before painting to combine line and colour. • Create a colour palette based upon colours observed in the natural or built world. • Use the qualities of watercolour and acrylic paints to create visually interesting pieces. • Combine colours, tones and tints to enhance the mood of a piece. • Use brush techniques and the qualities of paint to create texture. • Develop a personal style of painting, drawing upon ideas from other artists. • Build up layers of colours. • Create an accurate pattern, showing fine detail. • Use a range of visual elements to reflect the purpose of the work. • Show life-like qualities and real-life proportions or, if more abstract, provoke different interpretations. • Use tools to carve and add shapes, texture and pattern. • Combine visual and tactile qualities. • Use frameworks (such as wire or moulds) to	

		provide stability and form.	
	3. Take inspiration from the greats	• Give details (including own sketches) about the style of some notable artists, artisans and designers. • Show how the work of those studied was influential in both society and to other artists. • Create original pieces that show a range of influences and styles.	
Enrichment Opportunities	• Visit to Osmington Bay in Dorset to learn new skills and discover the Jurassic coast, with a visit to Lulworth Cove included.		

	Key Skills	Milestones Covered	Lesson Outline
Science	1. Work scientifically	• Plan enquiries, including recognising and controlling variables where necessary. • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. • Take measurements, using a range of scientific equipment, with increasing accuracy and precision. • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. • Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.	Light and Sight • Week 1. Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes Recognise that light appears to travel in straight lines. • Week 2. Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye • Week 3. Planning different types of

		• Present findings in written form, displays and other presentations. • Use test results to make predictions to set up further comparative and fair tests. • Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.	scientific enquiries to answer questions, including recognising and controlling variables where necessary. Children will have investigated how light can be reflected.
	Understand electrical circuits This concept involves understanding circuits and their role in electrical applications.	• Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. • Use recognised symbols when representing a simple circuit in a diagram.	• Week 4. Children will have carried out and reported on an investigation into which fabric reflects most light. • Week 5. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.
RE	1. Understand beliefs and teachings	• Explain how some teachings and beliefs are shared between religions. • Explain how religious beliefs shape the lives of individuals and communities.	Do clothes express belief? Week 1. Create and complete a survey regarding your choice of clothing. Respond to the question do clothes express belief?
	2. Understand practices and lifestyles	• Explain the practices and lifestyles involved in belonging to a faith community. • Compare and contrast the lifestyles of different faith groups and give reasons why some within the same faith may adopt different lifestyles. • Show an understanding of the role of a spiritual leader.	Week 2. Looking at a selection of photographs, do we judge people based on the clothes they are wearing? What judgements can we make? Week 3. Compare and contrast how different religions express themselves

	3. Understand how beliefs are conveyed	• Explain some of the different ways that individuals show their beliefs.	through their garments and artefacts. Look for similarities and differences and discuss. Week 4. A look in depth at Muslim/Sikh men and women's attire and understand the reasons for their clothing choices. Week 5. A look in depth at Hindu/Jewish men and women's attire and understand the reasons for their clothing choices. Week 6. A look in depth at church clergy uniforms, nuns and monks drawing comparisons with other religions. Create own fact sheet on another chosen faith to add to your information.
	4. Reflect	• Recognise and express feelings about their own identities. Relate these to religious beliefs or teachings. • Explain their own ideas about the answers to ultimate questions. • Explain why their own answers to ultimate questions may differ from those of others.	
	5. Understand values	• Explain why different religious communities or individuals may have a different view of what is right and wrong. • Show an awareness of morals and right and wrong beyond rules (i.e. wanting to act in a certain way despite rules). • Express their own values and remain respectful of those with different values.	
Computing	1. Code	• Change the position of objects between screen layers (send to back, bring to front). • Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation. • Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions.	Programming A – Variables in games Week 1 Introducing variables - Learners are introduced to variables. They see examples of real-world variables (score and time in a football match) before they explore them in a Scratch project. Learners then design and make their own project that includes variables. Finally, learners identify that variables are named and that they can be letters (strings) as well as numbers.
	1. Connect	• Collaborate with others online on sites approved and moderated by teachers. • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. • Understand and demonstrate knowledge that it is illegal to	Week 2. Variables in programming - Learners understand that variables are used in programs, and that they can only

		download copyrighted material, including music or games, without express written permission, from the copyright holder. • Understand the effect of online comments and show responsibility and sensitivity when online. • Understand how simple networks are set up and used.	hold a single value at a time. They complete an unplugged task that demonstrates the process of changing variables. Then, learners explore why it is important to name variables and apply their learning in a Scratch project in which they make, name, and update variables.
	2. Communicate	• Choose the most suitable applications and devices for the purposes of communication. • Use many of the advanced features in order to create high quality, professional or efficient communications.	Week 3. Improving a game - Learners apply the concept of variables to enhance an existing game in Scratch. They predict the outcome of changing the same change score block in different parts of a program, then they test their predictions in Scratch. Learners also experiment with using different values in variables, and with using a variable elsewhere in a program. Finally, they add comments to their project to explain how they have met the objectives of the lesson.
	2. Collect	• Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.	Week 4. Designing a game - Learners work at the 'design' level of abstraction, where they create their artwork and algorithms. Learners first design the sprites and backgrounds for their project, then they design their algorithms to create their program flow. Week 5 Design to code - Learners implement the algorithms that they created in Lesson 4. In doing this, they identify variables in an unfamiliar project

			and learn the importance of naming variables. They also have the opportunity to add another variable to enhance their project.
Music	1. Perform	• Take part in singing, accurately following the melody. • Follow instructions on how and when to sing or play an instrument. Make and control long and short sounds, using voice and instruments. • Imitate changes in pitch.	Week 1. Listen and Appraise - A New Year Carol by Benjamin Britten. Play games and talk about the music. Week 2. Listen and Appraise - A New Year Carol - Urban Gospel version. How is this version different from Britten's version? Week 3. Listen and Appraise - I Mun be Married on Sunday by Benjamin Britten. Play games and learn to sing the song. Week 4. Listen and Appraise - I Mun Be Married On Sunday - Bhangra version. Play games and perform the song. Week 5. Listen and Appraise - Fishing Song by Benjamin Britten. Choose what you perform today. Start to prepare for the end-of-unit performance. Listen and Appraise - Fishing Song - South African version. Research Benjamin Britten's life and music.
	2. Compose	• Create a sequence of long and short sounds. • Clap rhythms. • Create a mixture of different sounds (long and short, loud and quiet, high and low). • Choose sounds to create an effect. • Sequence sounds to create an overall effect. • Create short, musical patterns. • Create short, rhythmic phrases.	
	3. Transcribe	• Use symbols to represent a composition and use them to help with a performance.	
	4. Describe music	• Identify the beat of a tune. • Recognise changes in timbre, dynamics and pitch.	
French	1. Read fluently	• Read out loud everyday words and phrases. • Use phonic (or logographic in Mandarin) knowledge to read words. • Read and understand short written phrases.	Week 1. Pronounce some unfamiliar words using the phonic support. Listen and recognise the parts of the body. Join in with the song.

		• Read out loud familiar words and phrases. • Use books or glossaries to find out the meanings of new words.		Week 2. Review the parts of the body. Review use of indefinite article. Review knowledge of singular and plural nouns.
	2. Write imaginatively	• Write or copy everyday words correctly. • Label items and choose appropriate words to complete short sentences. • Write one or two short sentences. • Write short phrases used in everyday conversations correctly.		Week 3. Review singular and plural of nouns. Review position of colour adjectives. Preparation for writing a description of a monster.
	3. Speak confidently	• Understand a range of spoken phrases. • Understand standard language (sometimes asking for words or phrases to be repeated). • Answer simple questions and give basic information. • Give responses to questions about everyday events. • Pronounce words showing a knowledge of sound patterns.		Week 4. Review position of adjectives. Review agreement of adjectives in singular. Name adjectives which go before and after the noun. Pronounce the adjectives petit, grand, gros, long in masculine and feminine form. Write a sentence using support with an adjective of size, colour and noun.
	4. Understand the culture of the countries in which the language is spoken	• Identify countries and communities where the language is spoken. • Demonstrate some knowledge and understanding of the customs and features of the countries or communities where the language is spoken. • Show awareness of the social conventions when speaking to someone.		Week 5. Plural agreement of adjectives. Pronounce some unfamiliar words. State how nouns become plural. Read, identify and build sentences with adjectives which are singular, plural, masculine and feminine.
PE	1. Develop practical skills in order to participate, compete and lead a healthy lifestyle.	• Choose and combine techniques in game situations (running, throwing, catching, passing, jumping and kicking, etc.). • Work alone, or with team mates in order to gain points or possession. • Choose the most appropriate tactics for a game. • Uphold the spirit of fair play and respect in all competitive		Weeks 1-5 1. Invasion Games • Yoshi (Territorial running game) • Jail Break • Tag Rugby • Netball • Basketball

		situations. • Combine sprinting with low hurdles over 60 metres. • Choose the best place for running over a variety of distances. • Throw accurately and refine performance by analysing technique and body shape. • Show control in take-off and landings when jumping. • Compete with others and keep track of personal best performances, setting targets for improvement.	2. Dance/Movement Compose creative and imaginative dance sequences. Week 1: Perform expressively and hold a precise and strong body posture. Week 2: Perform and create complex sequences. Week 3: Express an idea in original and imaginative ways. Week 4: Plan to perform with high energy, slow grace or other themes and maintain this throughout a piece. Week 5: Perform complex moves that combine strength and stamina gained through gymnastics activities (such as cartwheels or handstands).
PSHE	1. Work hard	• Have fun working hard. • Understand the benefits of effort and commitment. • Continue to practise even when accomplished. • Encourage others by pointing out how their efforts gain results.	Week 1. New Year's Resolutions, considering goals for life and how I can be the best me. Week 2. Recognise that bullying and discriminatory behaviour can result from disrespect of people's differences.
	2. Concentrate	• Give full concentration. • 'Tune out' most distractions. • Understand techniques and methods that aid concentration. • Develop expertise and deep interest in some things.	Week 3 We have more in common than not. Know that all people are unique but that we have far more in common with each other than what is different about us. Week 4. Respecting differences, Demonstrate ways of showing respect to others, using verbal and non-verbal communication.
	3. Not give up	• Show a determination to keep going, despite failures or setbacks. • Reflect upon the reasons for failures and find ways to bounce back. • Stick at an activity even in the most challenging of circumstances.	Week 5. Tolerance and respect for others

		• See possibilities and opportunities even after a disappointment.	
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For English and maths plan see separate long-term plans.