



Year 1 - Autumn 2019

History (Shackleton)	Geography (Polar regions)	Computing (Programming)	Art (Patterns) /DT (Mechanisms)	Science (Everyday materials & Seasons)	RE (Christianity)
<ul style="list-style-type: none"> •The lives of significant individuals in the past who have contributed to national and international achievements •Events beyond living memory that are significant nationally or globally 	<ul style="list-style-type: none"> •Use world maps, atlases and globes •Name and locate the world's 7 continents and 5 oceans •The location of cold areas of the world in relation to the Equator and the North and South Poles •Identify seasonal and daily weather patterns in the UK (link to science) 	<ul style="list-style-type: none"> •Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions •Create and debug simple programs •Use logical reasoning to predict the behaviour of simple programs 	<p><u>Art</u>: use drawing to share ideas, experiences and imagination</p> <ul style="list-style-type: none"> •to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space <p>•<u>Design</u>: design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>*generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>•<u>Make</u>: select from and use a range of equipment to perform practical tasks]</p> <p>*select from and use a wide range of materials according to their characteristics</p> <p><u>Evaluate</u>: explore and evaluate a range of existing products</p> <p>*evaluate their ideas and products against design criteria</p> <p><u>Technical knowledge</u>: build sliders and levers, exploring how they can be made more effective through measurement and shape</p> <p>*explore and use mechanisms [for example, levers and sliders], in their products.</p>	<p><u>Everyday materials</u></p> <ul style="list-style-type: none"> •distinguish between an object and the material from which it is made •identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock •describe the simple physical properties of a variety of everyday materials •compare and group together a variety of everyday materials on the basis of their simple physical properties <p><u>Working scientifically</u></p> <ul style="list-style-type: none"> •observing closely, using simple equipment •performing simple tests •identifying and classifying •using their observations and ideas to suggest answers to questions •gathering and recording data to help in answering questions <p><u>Seasonal changes</u></p> <ul style="list-style-type: none"> •observe changes across the 4 seasons •observe and describe weather associated with the seasons and how day length varies 	<ul style="list-style-type: none"> •What can you learn about Christianity from a visit to a Church? •How do Christians celebrate Harvest? •What is the Christian meaning of Christmas?
<p>Pupils should be taught:</p>	<p>Pupils should be taught:</p>	<p>Pupils should be taught:</p>	<p>Pupils should be taught:</p>	<p>Pupils should be taught:</p>	<p>Pupils should be taught:</p>
<ul style="list-style-type: none"> ◇What we can learn from the opportunity to meet a real life polar explorer in school ◇Who the earliest explorers were, what they did and what they achieved (Vikings) ◇About Ernest Shackleton's background and expeditions to the Antarctic ◇The advances of polar exploration in modern day—linking work and ideas to the information gained from the polar explorer's visit to school ◇ How polar exploration has changed over time ◇The comparisons between the three specific explorers—identifying the similarities and differences between journey (route and duration), equipment available and utilised, purpose of travel, etc. 	<ul style="list-style-type: none"> ◇To identify and locate the seven continents on a globe and world map ◇To identify and locate oceans around the world ◇To locate and compare the polar regions (where can people live permanently, which is the coldest, which is a continent, etc). ◇To understand and compare the weather (temperatures) in the Arctic and Antarctic (Number and Place Value) ◇The weather compared to where we live and why it is different (clothing, temperate, long days and nights) ◇Key facts about major polar animals species and issues they are facing ◇How we can help to save the Arctic (Greenpeace campaign link) 	<ul style="list-style-type: none"> ◇What an algorithm is ◇To create an algorithm for making a sandwich ◇How to instruct and follow simple one step instructions (human BeeBot) ◇To become familiar with how BeeBots operate ◇To programme a BeeBot to follow a set algorithm ◇To create an algorithm for a BeeBot to follow ◇To know what debugging means, and to debug an algorithm (using a grid) ◇To debug a sequence for a BeeBot (possibly over two lessons) ◇To open Scratch Junior and give basic instructions to move the character ◇To programme Scratch by following an algorithm ◇To create an algorithm for Scratch to follow ◇ To debug a written algorithm for Scratch (not on ipads) ◇To debug an algorithm for Scratch 	<p><u>Drawing—patterns and faces</u></p> <ul style="list-style-type: none"> ◇Sketching and shading to show detail ◇Shape and proportion of a human face ◇How to use colour to highlight and create tone ◇How to use different media to add colour (paint, pencils, pastels, etc) ◇How to use repeating shapes to create a pattern (research Art Deco and Wassily Kandinsky) <p><u>Mechanisms—sliders and levers</u></p> <ul style="list-style-type: none"> ◇To explore existing sliders and levers (books, etc) looking at shapes and materials used ◇To investigate direction and length of sliders and levers ◇To create a simple design brief (including function and aesthetics) ◇To create annotated sketches and instructions to inform ◇How to select and use appropriate tools and materials to make the mechanism ◇To evaluate the mechanism to the original design criteria and improve 	<ul style="list-style-type: none"> ◇To identify a range of materials (material hunt) ◇To distinguish between everyday objects and the materials they are made from ◇To use physical properties to describe objects and to group/sort objects (rough, smooth, dull, shiny, hard, soft, etc) ◇To investigate the most suitable material for an umbrella (waterproof) ◇To identify/buy the most suitable items of clothing for a rainy day (Addition) ◇To complete a fair test to investigate the most suitable material for a window blind (for when the sun never sets) ◇To learn about the use and suitability of materials for a specific purpose (straw, wood and bricks) within a traditional tale ◇To investigate objects that sink and float, and explain why (to help Shackleton plan his journey) ◇To investigate the most suitable materials for insulation (keeping ice frozen, a polar bear warm or a polar explorer's coat) ◇ To know about the four seasons in accordance to months of the year ◇ To understand the changes across the seasons ◇To compare the weather across the seasons 	<ul style="list-style-type: none"> ◇The meaning of Harvest Festival and how Christians celebrate this event ◇The opportunity to observe and learn about Christian worship through visiting a local Church ◇What is found inside a Church (objects, their purpose and their symbolism) ◇Key events that take place in a church (weddings, Christenings, etc) ◇Messages/biblical stories within Christianity, for example, The Good Samaritan ◇Modern day application of Christian values (sharing, kindness, looking after the environment, etc) ◇The events of the Christmas story
<p><u>Language</u></p> <p>Expeditions, explorers, Vikings, communities, Shackleton,</p>	<p><u>Language</u></p> <p>Continents, countries, equator, polar regions, atlas, globe, ocean, environment, Arctic, Antarctica</p>	<p><u>Language</u></p> <p>Algorithm, debugging, sequence, left/right, BeeBot, program, goal, purpose, instruction</p>	<p><u>Language</u></p> <p>Portrait, techniques, tone, mechanism, sliders, levers</p>	<p><u>Language</u></p> <p>Physical properties, man made, waterproof, opaque/transparent, material, season, autumn, spring, summer, winter</p>	<p><u>Language</u></p> <p>Church, harvest, symbolism, Bible, Vicar, pew, altar, wedding, baptism, Christening</p>