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SPRING 1	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6
Geography	Introductory knowledge – builds on Geography unit end of Autumn 2. P. of Study Geography Fieldwork 4 Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies. Knowledge Year 6 A geographical area can be understood by using grid references and lines of latitude and longitude to identify position, contour lines to identify height above sea level and map symbols to identify physical and human features. Specific knowledge Year 6 There are five major lines of latitude. These are the equator at 0°, the Tropics of Cancer (23.5°N) and Capricorn (23.5°S) and the Arctic (66.5°N) and Antarctic (66.5°S) Circles. Specific knowledge Year 6 Latitude and longitude enable locations on Earth to be identified in relation to the equator and the Prime Meridian. Latitude and longitude are measured in degrees. Skill Year 6 Use grid references, lines of latitude and longitude, contour lines and symbols in maps and on globes to understand and record the geography of an area. WOW EVENT Return of the Emperor Penguin. Using a visual stimulus, the child write about the stark landscape of Antarctica that is devoid of life. To create synthetic snow demonstrating an endothermic reaction. Polar expedition P. of Study Geography Place 3 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a	Polar climates P. of Study Geography Place 3 Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America. Knowledge Year 6 Climate is the long-term pattern of weather conditions found in a particular place. Climates can be compared by looking at factors including maximum and minimum levels of precipitation and average monthly temperatures. Specific knowledge Year 6 The Arctic region has cold winters and cool summers. Average Arctic temperatures range from -43°C to 13°C depending on the season and location. The Antarctic region has cold winters and cool summers. Antarctica is the coldest, windiest and driest place on Earth. Average temperatures range between -60°C and -20°C . Skill Year 6 Describe the climatic similarities and differences between two regions. Polar days and nights P. of Study Geography Location 5 Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Knowledge Year 6 The Northern Hemisphere is the part of Earth that is to the north of the equator. The Southern Hemisphere is the part of Earth that is to the south of the equator. The Prime Meridian is the imaginary line from the North Pole to the South Pole that passes through Greenwich in England and marks 0° longitude,	Polar Oceans P. of Study Breadth Geography 2 Year 6 Aims Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS); communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length. 6 Year 6 Features Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 6 Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions. Year 6 The polar oceans are significantly colder than other world oceans. This influences the presence of sea ice, glaciers and icebergs. Skill(s) Year 6 Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques. View progression Year 6 Explain how the presence of ice makes the polar oceans different to other oceans on Earth. Polar Landscapes P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 6	Climate Change P. of Study Geography Features 6 Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Knowledge Year 6 Climate change is the long-term change in expected patterns of weather that contributes to the melting of polar ice caps, rising sea levels and extreme weather. Climate change is caused by global warming. Human activity, such as burning fossil fuels, deforestation, habitat destruction, overpopulation and rearing livestock, all contribute to global warming. Skill Year 6 Explain how climate change affects climate zones and biomes across the world. Natural Resources P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 6 Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water. Specific knowledge Year 6 Natural resources in the Arctic include oil, gas, metals, minerals, fish, wood and freshwater. Combinations of these natural resources can be found in every country in the Arctic Circle and under the Arctic Ocean. Skill Year 6 Describe the distribution of natural resources in an area or country.	Indigenous People P. of Study Geography Features 6 Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Knowledge Year 6 The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement. Specific knowledge Year 6 Traditionally, indigenous people in the Arctic adapted to the cold, harsh conditions by hunting and eating animals native to the area, such as seals, whales and walruses and using reindeer skins to keep warm. Many lived nomadic lifestyles following reindeer herds. Specific knowledge Year 6 Today, many indigenous people in the Arctic live in permanent settlements and have a modern lifestyle, but some still follow traditional ways of life. Skill Year 6 Explain how humans function in the place they live. Case Study- Tourism in Antarctica P. of Study Breadth Geography Aims 2 Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time. Knowledge Year 6 Tourism is an industry that involves people travelling for recreation and leisure. It has had an environmental, social and economic impact on many regions and countries. Specific knowledge Year 6 Visitor numbers are currently low in Antarctica, cruise ships are well regulated, there are no hotels or facilities for permanent residents, and tourists are asked to follow strict guidelines to ensure the land and wildlife isn't damaged. Skill Year 6 Present a detailed account of how an industry, including tourism, has changed a place or landscape over time.	Polar Discovery P. of Study Breadth History Aims 14 Know and understand significant aspects of the history of the wider world: the nature of ancient civilisations; the expansion and dissolution of empires; characteristic features of past non-European societies; achievements and follies of mankind. Knowledge Year 6 An achievement or discovery may be significant because it affects the lives of other people or the natural world; moves human understanding forward; rights wrongs and injustices or celebrates the highest attainments of humans. Specific knowledge Year 6 Great achievements within Antarctic exploration include Captain Cook's crossing of the Antarctic Circle, in the 1770s; Captain James Clark Ross' discovery of Mount Erebus, the Ross Sea and the Ross Ice Shelf; and the expedition to reach the South Pole by Shackleton, Amundsen and Scott, between 1901 and 1916 during the Heroic Age of Antarctic Exploration. Skill Year 6 Describe some of the significant achievements of mankind and explain why they are important. Significant Decisions (Robert Falcon Scott) P. of Study Breadth History Aims 2 Gain historical perspective by placing their growing knowledge into different contexts: understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales. Knowledge Year 6 Decisions can be made for a variety of reasons, including belief, lack of options, cultural influences and personal gain. Decisions are influenced by the cultural context of the day, which may be different to

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	region in a European country, and a region within North or South America. Knowledge Year 6 Climate is the long-term pattern of weather conditions found in a particular place. Climates can be compared by looking at factors including maximum and minimum levels of precipitation and average monthly temperatures. Specific knowledge Year 6 The Arctic is the area that is north of the Arctic Circle (66.5°N). The Arctic region is made up of the Arctic Ocean, surrounded by the continents of Europe, Asia and North America. Physical features of the Arctic include ice sheets, ice caps, mountains and hills, large rivers and lakes, tundra (areas of permanently frozen soil) and some coniferous forest. The Arctic has long, cold, dark winters and cool, light summers. Specific knowledge Year 6 Antarctica is a continent, located south of the Antarctic Circle (66.5°S). Most of the landscape is ice-covered mountains, glaciers or ice sheets. The South Pole (90°S) is the most southern geographical point on Earth. The Antarctic has long, cold, dark winters and cool, light summers. Skill Year 6 Describe the climatic similarities and differences between two regions.	from which all other longitudes are measured. Specific knowledge Year 6 The boundaries of the polar regions are marked by the Arctic and Antarctic Circles. The polar regions experience the largest differences in daylight, as the effect of Earth's tilt is much more pronounced. It is the tilt towards the Sun that creates near-constant daylight, known as polar day or Midnight Sun. The tilt away from the Sun creates near constant darkness, known as polar night. Skill Year 6 Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night).	Climate change is the long-term change in expected patterns of weather that contributes to the melting of polar ice caps, rising sea levels and extreme weather. Climate change is caused by global warming. Human activity, such as burning fossil fuels, deforestation, habitat destruction, overpopulation and rearing livestock, all contribute to global warming. Skill Year 6 Explain how climate change affects climate zones and biomes across the world.	Spirit of the Wild – Animal Event Experience in school		the cultural context today, and should be taken into account when making a judgement about the actions of historical individuals. Specific knowledge Year 6 The decisions Robert Falcon Scott made during his final attempt to reach the South Pole, including his refusal to use dogs to pull sledges, taking inadequate food supplies, and asking Bowers to join the team during their final push to the South Pole, all negatively affected the expedition and were factors in its failure. Skill Year 6 Examine the decisions made by significant historical individuals, considering their options and making a summative judgement about their choices. Northern Lights information and Art of Northern Lights using chalk PARENT PIT STOP
Art (See below)						

SCIENCE **Evolution and inheritance:** • Inheritance (6.10) • Adaptation (6.11) • Evolution (6.12)	Inherited and acquired characteristics. (6.10)	The role of genes in the inheritance of characteristics. (6.10)	Investigating adaptive advantages in the natural world. (6.11)	Darwin's theory of evolution by natural selection. (6.12)	Demonstrating the effect of beak shape on survival. (6.12)	Evidence supporting evolution in the fossil record. (6.12)	Evidence supporting the theory of human evolution. (6.12)

MUSIC Spring 1	Find out about texture, sing scales and arpeggios, and learn Section 3 of *Dona nobis pacem*.	Practise Section 3 and learn Section 2 of the round.	Progression snapshot 2. Make a video recording of children singing.	Learn Section 1 of the round, play a notation game, find out about sacred music in Latin.	Practise singing different sections of the music together. Compose Part 1.	Put the round together. Compose Part 2.

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Dona nobis pacem *Dona nobis pacem* is a round in three parts that is set to a short prayer for peace. It is in Latin and comes from the *Agnus Dei* of a Roman Catholic Mass. The phrase 'Dona nobis pacem' translates as 'Grant us peace'. As well as being sung in churches, it has also been adopted for use as a song with a broader message about peace. The melody has been passed down orally and is thought to be traditional. In this unit, pupils will explore pulse work in 3-time, learn to sing the song as a round, learn about texture in music, and compare music with different textures. They will create their own pieces using given rhythms and chords, working from stick notation. This unit also contains the second of three progression snapshots that will be returned to and developed in Term 3 to collect evidence of pupils' progress. In Term 1, children sang *Throw, catch* in unison with dancing. This time children will learn to sing the chorus of the song in two-part harmony while also dancing. The activity should be videoed and passed to the Music Lead/Coordinator.	• Sing 5-note scales, and arpeggios. • Learn to sing Section 3 of the round *Dona nobis pacem.* • Learn about monophonic, homophonic, and polyphonic textures.	**Compare music with different textures.** • Practise scales, arpeggios, and Section 3 of the round. • Learn Section 2 of the round. • Recap monophonic and polyphonic textures. • Identify these musical textures in 17th-century sacred music from Europe.	• Recap the song *Throw, catch*, learnt in Term 1. • Learn a harmony part for the chorus and sing in two parts. • Practise Sections 1 and 3 of the round *Dona nobis pacem.* • Compare the textures of *Throw*, *catch* and *Dona nobis pacem*.	• Learn Section 1 of the round. • Recap Section 2 and sing with Section 3. • Play a game that uses notation from the song. • Find out about sacred music in Latin.	• Practise each section of the song. • In 3 groups, practise different ways to combine the 3 lines of music. Finish with all 3 sung at the same time. • Begin to compose using given rhythms and notes.	• Recap the 3 sections of the round and sing the while song in unison. • Sing the whole song as a round in 3 parts. • Continue the composing activity started the previous lesson. • Perform and record the pieces.
PE (ML) **SPRING 1** **Unit 1 Gymnastics**	1. Complete a six element sequence containing flight, contrasting shapes, and balances 2. Can take weight on hands to land on high apparatus from flight 3. Include twists/turns and changes of speed and direction	1. Dismounting from varying heights 2. Make simple judgments about own work and choose what level to work 3. Magic chair landing, jump forwards beyond cone while still maintain control, increase distance, jump into balance	1. Organise equipment in small groups to create a flight sequence 2. Express cannon in sequences 3. Work collaboratively to assign a leader and share ideas for sequence	1. Include a piece of equipment assigned to the group. For example: throw down spots, hoops etc 2. Refine individual aspects of sequence including jumps, starting and finishing position and use of cannon 3. Perform sequence to an audience	1. Devise pulse raising warm up which develops flexibility 2. Create a paired flight sequence demonstrating both unison and cannon 3. Recap unison in relation to gymnastics sequences	1. Select children to deliver warmup activity from the previous lesson 2. Create a six element sequence including cannon, unison, dismount (differentiated), a piece of equipment
PE (CT) **SPRING 1**	1. Play effectively in attack and defence 2. Score points against opposition 3. Support the player with the ball	1. Devise a warm-up for short passes 2. Perform a set play off a free pass	1. Communicate and devise tactics for attacking 2. Using the 'taking the distance, not the time' principle	1. Recognise the difference between attacking and defensive tactics 2. Apply these tactics in games	1. Refine and teach a warm-up to classmates 2. Communicating effectively when transitioning from attack to defence	1. To work as a team to implement defending and attacking strategies 2. Demonstrate skills learnt

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Tag Rugby		3. Suggest ways to improve the set play	3. Changing speed and direction to create try-scoring opportunities	3. Use the 'spaces not faces' idea to help their attacking play	3. Use agility and speed to help defend	3. Observe and analyse peers, offering suggestions to improve an individual or team's performance
COMPUTING **SPRING 1** **Programming – Variables** This unit explores the concept of variables in programming through games in Scratch. First, learners find out what variables are and relate them to real-world examples of values that can be set and changed. Then they use variables to create a simulation of a scoreboard. In Lessons 2, 3, and 5, which follow the Use-Modify-Create model, learners experiment with variables in an existing project, then modify them, before they create their own project. In Lesson 4, learners focus on design. Finally, in Lesson 6, learners apply their knowledge of variables and design to improve their games in Scratch.	To define a 'variable' as something that is changeable • I can identify examples of information that is variable • I can explain that the way a variable changes can be defined • I can identify that variables can hold numbers or letters	To explain why a variable is used in a program • I can identify a program variable as a placeholder in memory for a single value • I can explain that a variable has a name and a value • I can recognise that the value of a variable can be changed	To choose how to improve a game by using variables • I can decide where in a program to change a variable • I can make use of an event in a program to set a variable • I can recognise that the value of a variable can be used by a program	To design a project that builds on a given example • I can choose the artwork for my project • I can create algorithms for my project • I can explain my design choices	To use my design to create a project • I can create the artwork for my project • I can choose a name that identifies the role of a variable • I can test the code that I have written	To evaluate my project • I can identify ways that my game could be improved • I can use variables to extend my game • I can share my game with others
PSHE						

NOTE: This art project requires 5 hours of teaching. It is suggested that you take 1 ½ DAYS to complete. Please discuss with Year leader when to place these days in.

Spring This project teaches children about the genre of environmental art. They study how artists create artwork that addresses social and political issues related to the natural and urban environment. Children work collaboratively to create artwork with an environmental message. **Artists** Antony Gormley, Olafur Eliasson, Edith Meusnier, Chris Jordan and John Akomfrah	P. of Study Art and design 6 Learn about great artists, architects and designers in history. Knowledge Year 6 Perspective is the representation of 3-D objects on a 2-D surface. Abstraction refers to art that doesn't depict the world realistically. Figurative art is modern art that shows a strong connection to the real world, especially people. Conceptual art is art where the idea or concept behind the piece is more important than the look of the final piece.	**Recycle, reuse and repurpose – p t1** P. of Study Art and design 8 Create sketchbooks to record their observations and use them to review and revisit ideas. Knowledge Year 6 A mood board is an arrangement of images, materials, text and pictures that can show ideas or concepts. A montage is a set of separate images that are related to each other and placed together to create a single image. Skill Year 6 Gather, record and develop information from a range of sources to create a mood board or montage to inform their thinking about a piece of art.	**Recycle, reuse and repurpose – pt 2** P. of Study Art and design 8 Create sketchbooks to record their observations and use them to review and revisit ideas. Knowledge Year 6 A mood board is an arrangement of images, materials, text and pictures that can show ideas or concepts. A montage is a set of separate images that are related to each other and placed together to create a single image. Skill Year 6 Gather, record and develop information from a range of sources to create a mood board or montage to inform their thinking about a piece of art.	**Lesson 3: Ocean Art** P. of Study Art and design 20 Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay). Knowledge Year 6 A 3-D form is a sculpture made by carving, modelling, casting or constructing. Specific knowledge Year 6 Art can be an effective way of portraying environmental messages. This is because artworks can have an immediate, sensory impact on the viewer.	**Innovate: Creating Environmental Art (90 mins)** P. of Study Art and design 20 Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay). Knowledge Year 6 In conceptual art, the idea or concept behind a piece of art is more important than the look of the final piece. Knowledge Year 6 Environmental art addresses social and political issues relating to natural and urban environments. Skill Year 6 Create innovative art that has personal, historic or conceptual meaning. View progression Skill Year 6 Create art inspired by or giving an environmental message **Evaluation (90 mins)** P. of Study Computing 2 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

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	Specific knowledge Year 6 Environmental art addresses social and political issues relating to the natural and urban environment. Specific knowledge Year 6 Significant environmental artists include, Antony Gormley, Olafur Eliasson, Edith Meusnier, Chris Jordan and John Akomfrah. Skill Year 6 Compare and contrast artists' use of perspective, abstraction, figurative and conceptual art			Skill Year 6 Create a 3-D form using malleable materials in the style of a significant artist, architect or designer.	accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Knowledge Year 6 A variety of software, such as word processing software, image editing software or internet services, can be selected, used and combined to meet a goal. Skill Year 6 Select, use and combine a variety of software, including internet services, to meet a goal.

SPRING 2	Wk8	Wk7	Wk9	Wk10	Wk11	Wk12
History	**Case Study – Shackleton (2 hours) Additional lessons on Shackleton completed in Reading lessons during Week 8** P. of Study Breadth History Aims 11 Understand 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. Knowledge Year 6 Sources of historical information should be read critically to prove or disprove a historically valid idea by setting the report into the historical context in which it was written, understanding the background and ideologies of the writer or creator and knowing if the source was written at the time of the event (primary evidence) or after the event (secondary evidence). Specific knowledge Year 6 Ernest Shackleton was an explorer who travelled to the Antarctic. In 1914 he began his third expedition, the Imperial Trans-Antarctic Expedition' sailing on *Endurance*. His ship became stuck in sea ice, eventually sinking in 1915. In 1916, the team were rescued, with not a single member having set foot on Antarctica. Skill Year 6 Think critically, weigh evidence, sift arguments and present a	**The Unsinkable Titanic (3 hours) Factfile (after reading Titanic Detective Agency in Spring 1, children are now creating a Fact File – facts not fiction)** P. of Study Breadth History Aims 19 Understand 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. Knowledge Year 6 Historical narratives can describe long- and short-term causes and consequences of an event; highlight the actions of significant individuals and explain how significant events caused great change over time. Specific knowledge Year 6 The 'unsinkable' RMS *Titanic* set sail from Southampton, on 10th April 1912, to cross the Atlantic Ocean. On 14th April, the *Titanic* hit an iceberg and sank three hours later, killing approximately 1500 people. Around 700 people survived and were rescued by the SS *Carpathia*. Skill Year 6 Present a detailed historical narrative about a significant global event.	**Investigating Icebergs (2 hours) (Science based – work in FOS books)** P. of Study Science Enquiry 15 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Knowledge Year 6 A method is a set of clear instructions for how to carry out a scientific investigation, including what equipment to use and observations to make. A variable is something that can be changed during a fair test. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding. Skill Year 6 Plan and carry out a range of enquiries, including writing methods, identifying and controlling variables, deciding on equipment and data to collect and making predictions based on prior knowledge and understanding.	**Innovate: Discovering the Arctic (2 hours)** P. of Study Spoken language 4 Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings. Skill Year 6 Choose between formal and informal language, depending on the situation. **Parent Finale – Children presenting their knowledge on the Frozen Kingdoms**		

	perspective on an aspect of historical importance	Present a detailed historical narrative about a significant global event.				
					Bridges and engineers (30 mins) P. of Study Design and technology7 Year 6 Evaluate Investigate and analyse a range of existing products. 1 Year 6 Evaluate Understand how key events and individuals in design and technology have helped shape the world. Knowledge Year 6 People's lives have been improved in countless ways due to new inventions and designs. For example, the Morrison shelter, designed by John Baker in 1941, was an indoor air-raid shelter used in over half a million homes during the Second World War. It saved the lives of many people caught in bombing raids. Year 6The significance of a designer or inventor can be measured in various ways. Their work may benefit society in health, transport, communication, education, the built environment or technology. It may enhance culture in different areas, such as fashion, ceramics or computer games. Year 6Bridges provide a safe route over obstacles, including roads and rivers. They are used by pedestrians, cars, trains and pipelines. Year 6Bridge structures have changed over time with innovations in design and materials. Significant bridges include the Menai Bridge, Clifton Suspension Bridge and Forth Bridge. Skill(s)Year 6 Analyse how an invention or product has	**Strengthening paper bridges (30 minutes)** P. of Study Design and technology 2 Year 6 Technical Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. 5 Year 6 Make Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. Knowledge Year 6 Strength can be added to a framework by using multiple layers. For example, corrugated cardboard can be placed with corrugations running alternately vertically and horizontally. Triangular shapes can be used instead of square shapes because they are more rigid. Frameworks can be further strengthened by adding an outer cover. Year 6It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability. Skill(s) Year 6 Select the most appropriate materials and frameworks for different structures, explaining what makes them strong. View progression

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					significantly changed or improved people's lives. View progression Year 6 Present a detailed account of the significance of a favourite designer or inventor. **Features of Bridges (45 minutes)** P. of Study Design and technology Evaluate 7 Investigate and analyse a range of existing products. Knowledge Year 6Products and inventions can be compared using a range of criteria, such as the impact on society, ease of use, appearance and value for money. Specific knowledge Year 6The four main bridge types are the beam bridge, arch bridge, truss bridge and suspension bridge. They each spread forces in different ways to remain strong and stable. Skill Year 6 Create a detailed comparative report about two or more products or inventions.	Year 6 Choose the best materials for a task, showing an understanding of their working characteristics. **Triangles for strength (30 minutes)** P. of Study Design and technology 2 Year 6 Technical Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. 5 Year 6 Make Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. Knowledge Year 6 Strength can be added to a framework by using multiple layers. For example, corrugated cardboard can be placed with corrugations running alternately vertically and horizontally. Triangular shapes can be used instead of square shapes because they are more rigid. Frameworks can be further strengthened by adding an outer cover. Year 6It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability. Year 6Triangles are a strong shape used by engineers to add strength to a structure. When a force is applied to a triangle, it is distributed down each side,

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						making triangles difficult to distort or collapse. Skill(s) **DT** **Companion unit Engineer** This project teaches children about remarkable engineers and significant bridges, learning to identify features, such as beams, arches and trusses. They complete a bridge-building engineering challenge to create a bridge prototype. Year 6 Select the most appropriate materials and frameworks for different structures, explaining what makes them strong. View progression Year 6 Choose the best materials for a task, showing an understanding of their working characteristics.
SCIENCE **Living things and their habitats:** • Classification (6.8) • Microorganisms (6.7)	Grouping living things according to their characteristics. (6.8)	Exploring ways to distinguish between different organisms with the same characteristics. (6.8)	Classifying plants. (6.8)	Carl Linnaeus and his system of classification. (6.8)	Classifying microbes. (6.7)	Demonstrating the spread of microbes. Set up microbial growth investigation. (6.7)

MUSIC **Spring 2** **You to me are everything** This listening unit is based on the song *You to me are everything* by The Real Thing – a British soul group formed in the 1970s. During this unit, pupils will explore the key musical features of this track and develop an understanding of the term 'cover version'.	**Getting to know the music.** • Listen with attention to detail, recognise/identify key features in the music. • Develop knowledge of the music and where it comes from. • Learn to sing the chorus melody. • Learn to sing the chorus with a harmony note and added disco dance moves.	**Compare cover versions – part 1.** • Use music vocabulary and knowledge to compare pieces of music. • Identify key musical features. • Appreciate a wide range of music and develop an understanding of its origins.	**Compare cover versions – part 2.** • Use music vocabulary and knowledge when comparing pieces of music. • Identify key musical features. • Appreciate a wide range of music and develop an understanding of its origins. • Practise some choreography to a disco song.	**Twinkle Variations** **Twinkle on body percussion.** • Interpret a score and perform a piece using body percussion. • Learn about theme and variations form. • Invent variations upon a theme using body percussion. • Listen to Mozart.	**Twinkle on instruments.** • Orchestrate *Twinkle, twinkle little star* (choose which instruments play which parts). • Create a new variation and perform it.	**Twinkle improvisation.** • Learn about and create a passacaglia. • Learn about improvisation. • Improvise on top of a repeating bassline. • Structure ideas into a finished piece. • Perform to an audience/make a recording of their performance.

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Twinkle Variations Theme and variations is a musical form that has been used by composers for centuries. The composer chooses an often simple tune and then creates multiple versions (variations) of it by changing it in subtle ways. It works really well in the classroom because the difficult initial problem of thinking up material is done for us – all we have to do it is manipulate it, and in doing so we can learn many useful techniques and terminology.						
PE (ML) **SPRING 2** **Cricket**	1. Demonstrate urgency in acquiring runs in a given time 2. Attempt both attacking and defensive play as a batter 3. Attempt attacking field placement including slip, short leg and cover position	1. Tracking and catching a high ball 2. Catching a high ball to get players out 3. Attempting catches in a competitive game	1. Bowling the short ball 2. Using the short ball to tempt players to hit high 3. Attempt to catch the high ball off a short delivery	1. Track and retrieve the ball over distance 2. Identify when to work as pairs to field long balls 3. Explain how effective fielding can restrict runs scored	1. Demonstrate and describe the difference between an on and off drive 2. Discuss why you would use different types of shot in a game 3. Attempt an on drive	1. Use a range of defensive and attacking tactics in a game 2. Apply a range of known cricketing rules to a new game format 3. Attempt to bowl a variety of balls to get players out
PE (CT) **SPRING 2** **Hockey**	1. Play the role of both the defender and the attacker 2. Shoot from close range 3. Score points against opposition	1. Devise a warm-up for sending the ball over short distances 2. Perform a long corner routine as part of a team 3. Suggest ways to improve the success of long corners routines	1. Identifying players that need to be marked 2. Use speed and agility to stay with an opponent 3. Consistently mark in an appropriate position	1. Channel opposition players away from the middle of the pitch 2. Using the banana run channel players to your strong side 3. Apply channelling skills into a game	1. Recognise when and where a hit out should be taken 2. Play the hit out as a defender and position themselves to support the hitout 3. Move to create opportunities for a successful hit out	1. To work cooperatively to implement attacking and defending strategies 2. Use simple set plays 3. Demonstrate previous skills learnt in games
COMPUTING **SPRING 2** **Data and Information - Introduction to spreadsheets** This unit introduces the learners to spreadsheets. They will be supported in organising data into columns and rows to create their own data set. Learners will be taught the importance of formatting data to support calculations, while also being introduced to formulas and will begin to understand how they can be used to produce calculated data. Learners will be taught how to apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them. Learners will use	To create a data set in a spreadsheet • I can collect data • I can suggest how to structure my data • I can enter data into a spreadsheet	To build a data set in a spreadsheet • I can explain what an item of data is • I can choose an appropriate format for a cell • I can apply an appropriate format to a cell	To explain that formulas can be used to produce calculated data • I can explain which data types can be used in calculations • I can construct a formula in a spreadsheet • I can identify that changing inputs changes outputs	To apply formulas to data • I can calculate data using different operations • I can create a formula which includes a range of cells • I can apply a formula to multiple cells by duplicating it	To create a spreadsheet to plan an event • I can use a spreadsheet to answer questions • I can explain why data should be organised • I can apply a formula to calculate the data I need to answer questions	To choose suitable ways to present data • I can produce a chart • I can use a chart to show the answer to a question • I can suggest when to use a table or chart

spreadsheets to plan an event and answer questions. Finally, learners will create charts, and evaluate their results in comparison to questions asked.						
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NOTE: The completion of the DT project requires 1 day:

Designing a bridge protype	**Making a bridge protype**	**Evaluation**
P. of Study Design and technology 2 Year 6 Design Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. 2 Year 6 Design Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Knowledge Year 6 Design criteria should cover the intended use of the product, age range targeted and final appearance. Ideas can be communicated in a range of ways, including through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Skill(s) Year 6 Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.	P. of Study Design and technology Make 5 Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. Knowledge Year 6 It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability. Skill Year 6 Choose the best materials for a task, showing an understanding of their working characteristics.	P. of Study Design and technology Evaluate 3 Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Knowledge Year 6 Design is an iterative process, meaning alterations and improvements are made continually throughout the manufacturing process. Evaluating a product while it's being manufactured, and explaining these evaluations to others, can help to refine it. Skill Year 6 Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.