

Year A REAL Project		
How do we end up here? Wider Curriculum Theme- Our school Landing – Christmas cards design to sell at winter fair	How can you let your light shine? Wider Curriculum Theme- Our community Landing – Art exhibition in cultural quarter	Do we need the rainforest? Wider Curriculum Theme- Our World Landing – making and selling fair trade food to raise money for charity
<u>History</u> - the achievements of the earliest civilizations—an overview of where and when the first civilizations appeared and a depth study of one of Ancient Egypt - a local history study (King Richard 111 + Battle of Bosworth) <u>Geography</u> Locational Knowledge - locate the world’s countries, using maps to focus on Europe (including the location of Russia), concentrating on their environmental regions, key physical and human characteristics, countries, and major cities - identify the position and significance of latitude, longitude, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Human and Physical Geography - physical geography, including: climate zones, biomes and vegetation belts, rivers, water cycle - human geography, including: distribution of natural resources including energy, food, minerals and water. Geographical Skills & Fieldwork - use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied - use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world - 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. <u>Science</u> Living Things & their Habitats describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird - describe the life process of reproduction in some plants and animals. - Living Things & their Habitats - describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals - give reasons for classifying plants and animals based on specific characteristics. <u>DT – Tinkercad</u> Egyptian home 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	<u>Science</u> Light - recognise that light appears to travel in straight lines - 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 - 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 - use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <u>Science</u> Electricity - 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. <u>Computing – design and debug programme- crumble</u> - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts - use sequence, selection, and repetition in programs; work with variables and various forms of input and output - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <u>DT – Lightbox/fairground ride</u> 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 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - 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 Evaluate - investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world – James Dyson	<u>Geography</u> Locational Knowledge - locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities - identify the position and significance of latitude, longitude, Equator, Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Human and Physical Geography - physical geography, including: climate zones, biomes and vegetation belts, rivers, water cycle - human geography, including: distribution of natural resources including energy, food, minerals and water. <u>Properties and changes of materials</u> - compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution - use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating - give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic - demonstrate that dissolving, mixing and changes of state are reversible changes - explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. <u>DT – Bread-making</u> 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 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - 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

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Evaluate - investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <u>ART</u> <u>Stephen Wiltshire – perspective drawing</u> - to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing - about great artists, architects and designers in history	Technical Knowledge - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] - apply their understanding of computing to program, monitor and control their products. <u>ART</u> <u>Alan Caine - painting</u> - to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing, painting and - about great artists, architects and designers in history	Evaluate - investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world – Heston Blumenthal Technical Knowledge - understand and apply the principles of a healthy and varied diet - prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <u>ART</u> <u>Edward Saidi Tingatinga – Drawing, painting, collage</u> - to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing, painting - about great artists, architects and designers in history
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Year B REAL Project		
What can we learn from history? Wider Curriculum Theme- Our community Landing – Selling bags at Winter fayre Art display at space centre	Could humans ever become extinct? Wider Curriculum Theme- Our Wellbeing Landing – Wellbeing guide for school library	Do the Ancient Greeks still live on? Wider Curriculum Theme- Our Enterprise Landing – Mini Olympics for school
<u>Geography</u> Locational Knowledge - locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities - identify the position and significance of latitude, longitude, Equator, Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Human and Physical Geography - physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle - 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. <u>History</u> - a study of an aspect or theme in British History that extends pupils chronological knowledge beyond 1066 – WW2 Geographical Skills & Fieldwork - use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied - use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world - 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 <u>DT – Make do and Mend – Recycled material bag</u> 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 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing],	<u>Science</u> Evolution & Inheritance - recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents - identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Animals (including humans) - identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood - recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function - describe the ways in which nutrients and water are transported within animals, including humans <u>ART - Moths</u> - to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing - about great artists, architects and designers in history Taught separately from Project <u>ART</u> <u>Banksy - Printing</u> - to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials - about great artists, architects and designers in history	History - Ancient Greece – a study of Greek life and achievements and their influence on the western world Geography Locational Knowledge - locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities - identify the position and significance of latitude, longitude, Equator, Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Place Knowledge - 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 <u>Science</u> Animals (including humans) - describe the changes as humans develop to old age. <u>DT</u> 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 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - 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 Evaluate - investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world – Leonardo Da Vinci Cooking & Nutrition

accurately • 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 Evaluate • investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world – Vivienne Westwood <u>Science</u> Earth & Space • describe the movement of the Earth, and other planets, relative to the Sun in the solar system • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky. Forces • explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • identify the effects of air resistance, water resistance and friction, that act between moving surfaces • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. <u>ART</u> <u>Chelsey Bonsell - Collage</u> • to create sketch books to record their observations and use them to review and revisit ideas • to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] • about great artists, architects and designers in history		• understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. <u>ART</u> <u>Ranti Bam - Sculpting</u> • to create sketch books to record their observations and use them to review and revisit ideas • to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] • about great artists, architects and designers in history
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Computing	- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that - accomplish given goals, including collecting, analysing, evaluating and presenting data and information - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
Art	- to create sketch books to record their observations and use them to review and revisit ideas - to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] - about great artists, architects and designers in history.
Music	- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression - improvise and compose music for a range of purposes using the inter-related dimensions of music - listen with attention to detail and recall sounds with increasing aural memory - use and understand staff and other musical notations - appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians - develop an understanding of the history of music.
PSHE and VfS	Jigsaw
PE	- use running, jumping, throwing and catching in isolation and in combination - play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending - develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] - perform dances using a range of movement patterns - take part in outdoor and adventurous activity challenges both individually and within a team compare their performances with previous ones and demonstrate improvement to achieve their personal best. Swimming & Water Safety <i>All schools must provide swimming instruction either in KS1 or KS2.</i> - swim competently, confidently and proficiently over a distance of at least 25 metres - use a range of strokes effectively [for example, front crawl, backstroke and breaststroke] - perform safe self-rescue in different water-based situations.
Languages	- listen attentively to spoken language and show understanding by joining in and responding explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words - engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help* - speak in sentences, using familiar vocabulary, phrases and basic language structures develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases* - present ideas and information orally to a range of audiences* - read carefully and show understanding of words, phrases and simple writing appreciate stories, songs, poems and rhymes in the language - broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary - write phrases from memory, and adapt these to create new sentences, to express ideas clearly - describe people, places, things and actions orally* and in writing - understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.