Cornerstones Curriculum Subject Narratives

Art and Design

The art and design projects are well sequenced to provide a coherent subject scheme that develops children's skills and knowledge of visual elements, art forms, artists and art movements. Projects are placed alongside other subject projects where there are opportunities for making meaningful connections. For example, Beautiful Botanicals has been placed in the same teaching sequence as the science project Plant Nutrition and Reproduction. Where possible, projects with similar materials are spaced out to have as little strain on resources as possible. For example, in Key Stage 1, clay work is taught in different terms. Seasons are also a consideration for the placement of art and design projects. For example, if children are required to work outdoors, these projects have been placed in either the latter part of the spring or summer term.

Key Stage 1

In Key Stage 1, each autumn term begins with the colour project Mix It. The teaching of this project in Years 1 and 2 enables children to be introduced to and then revisit colour theory and provides plentiful opportunities for children to explore primary and secondary colours.

Year 1 begins by exploring themes directly related to the children themselves, such as their facial features, the surrounding natural world and their local community.
In Year 2, the projects expand children's artistic horizons to study a more comprehensive range of artists, artistic movements and creative techniques.

Lower Key Stage 2

In Lower Key Stage 2, each autumn term begins with the colour project Contrast and Complement. In Years 3 and 4, the teaching of this project enables children to build on their previous understanding of colour and further develop their expertise by studying theory.

In Year 3, children expand their experiences to study a broader range of art forms, artists and genres. They also begin to study art from specific and diverse periods of history, including prehistoric pottery and Roman mosaics. Other genres studied in Year 3 build on previous techniques learned in Key Stage 1 and include more complex techniques in printmaking, drawing, painting and textiles.

In Year 4, children develop more specialised techniques in drawing, painting, printmaking and sculpture. They explore ways in which ancient cultures have influenced art and crafts by

studying, for example, medieval weaving techniques and the religious significance of Islamic art.

Upper Key Stage 2

In Upper Key Stage 2, each autumn term begins with the colour project Tints, Tones and Shades. Teaching these projects in Years 5 and 6 enables children to build on their previous understanding of colour theory and develop further expertise with colour by studying tonal variations and more complex colour charts.

In Year 5, children develop and combine more complex artistic techniques in a range of genres, including drawing, painting, printmaking and sculpture. Children continue to build on their understanding of other historical periods and cultures by studying the ancient Chinese art form of taotie and the significance of the Expressionist movement.

In Year 6, children are encouraged to work more independently in projects like Environmental Artists and Distortion and Abstraction. Such projects require them to consider more conceptual representations of personal, environmental, social or political messaging. Children explore diversity in art by studying the projects Inuit and Trailblazers, Barrier Breakers. Throughout the art and design scheme, there is complete coverage of all national curriculum programmes of study.

Design Technology

Each project is based around a design and technology subject focus of structures, mechanisms, cooking and nutrition or textiles. The design and technology curriculum's electronic systems and IT monitoring and control elements are explicitly taught in our science projects to ensure the links between the subjects are highlighted. Where possible, meaningful links to other areas of the curriculum have been made. For example, the cooking and nutrition project Eat the Seasons is taught alongside the geography project Sow, Grow and Farm.

All the projects follow a structure where children are introduced to key concepts and build up knowledge and skills over time, using a more comprehensive range of equipment and building, cutting, joining, finishing and cooking techniques as they progress through school. All projects contain focused, practical tasks in the Develop stage to help children gain the knowledge and skills needed to complete their Innovate tasks independently. Throughout the design and technology scheme, there is complete coverage of all national curriculum programmes of study.

Throughout Key Stages 1 and 2, children build up their knowledge and understanding of the iterative design process. They design, make, test and evaluate their products to match specific design criteria and ensure they fit their purpose. Throughout the projects, children are taught to work hygienically and safely.

Key Stage 1

In the autumn term of Year 1, children begin to learn about structures in the project Shade and Shelter before designing and making a shelter. In the spring term project Taxi!, they learn the term 'mechanism' and assemble and test wheels and axles. In the summer term,

children begin to learn about food sources in the project Chop, Slice and Mash and use simple preparation techniques to create a supermarket sandwich.
In the autumn term of Year 2, children learn more about food in the project Remarkable Recipes, where they find out about food sources, follow recipes and learn simple cooking techniques. In the spring term project Beach Hut, children develop their knowledge of structures further, learning to cut, join and strengthen wood for the first time. In the summer term, children begin to develop their understanding of textiles in Cut, Stitch and Join. They learn to sew a simple running stitch, use pattern pieces and add simple embellishments. They also continue to learn about mechanisms in the project Push and Pull by using sliders, levers and linkages in products.

Lower Key Stage 2
In the autumn term of Year 3, children continue to learn about food, understanding the concept of a balanced diet and making healthy meals in the project Cook Well, Eatwell. In the spring term project Making it Move, children extend their understanding of mechanisms by exploring cams and using joining and finishing techniques to make automaton toys. In the summer term project Greenhouse, they continue to develop their knowledge of structures, using triangles and braces for strength. They design and build a greenhouse, using their understanding of opacity and transparency and the needs of plants from science learning to inform their design.

In the autumn term of Year 4, children continue to develop their understanding of food in the project Fresh Food, Good Food. They learn about food safety and preservation technologies before designing and making packaging for a healthy snack. During the spring term project Functional and Fancy Fabrics, children continue to explore textiles, learning about the work of William Morris before designing, embellishing and finishing a fabric sample. In the summer term project Tomb Builders, they build on their knowledge of mechanisms, learning about six simple machines and using their knowledge to create a lifting or moving device prototype. They also explore and use electrical systems and IT monitoring and control in the science project Electrical Circuits and Conductors for the first time.

Upper Key Stage 2
In the autumn term of Year 5, children deepen their understanding of mechanisms by studying pneumatic systems in the project Moving Mechanisms. They learn about the forces at play and create a prototype for a functional, pneumatic machine. In the spring term project Eat the Seasons, children continue to explore food and nutrition, learning about seasonal foods and the benefits of eating seasonally. In the summer term, they learn more about structures in the project Architecture, studying the history of architecture and developing new ways to create structural strength and stability. They use computer-aided design and consolidate their making skills to produce scale models. They also explore the electrical conductivity of materials before making products incorporating circuits in the science project Properties and Changes of Materials.

In the autumn term of Year 6, children learn about processed and whole foods in the project Food for Life, creating healthy menus from unprocessed foods. In the spring term project Engineer, children consolidate their knowledge of structures, joining and strengthening techniques and electrical systems by completing a bridge-building challenge. In the summer

term project Make Do and Mend, they extend their knowledge of textiles by learning new stitches to join fabrics and using pattern pieces to create a range of products.

Geography

The geography projects are well sequenced to provide a coherent subject scheme that develops children's geographical knowledge, skills and subject disciplines. Geographical locations are not specified in the national curriculum, so they have been chosen to provide a broad and diverse understanding of the world. Where there are opportunities for making meaningful connections with other projects, geography projects are sequenced accordingly. For example, children revisit the geography of settlements in the history project School Days after studying types of settlements in the geography project Bright Lights, Big City. All geography projects are taught in the autumn and spring terms, with opportunities for schools to revisit less secure concepts in the summer term.

Key Stage 1

In Key Stage 1, each autumn term begins with essential skills and knowledge projects (Our Wonderful World in Year 1 and Let's Explore the World in Year 2). Teaching these projects in Years 1 and 2 enables children to be introduced to, or revisit, critical geographical concepts, aspects, skills and knowledge. These projects prepare children for the study of more thematic geography projects in the following term.

In the spring term of Year 1, children study the project Bright Lights, Big City. This project introduces children to the geography of urban environments and the physical and human features of the United Kingdom. In contrast, in the spring term of Year 2, children carry out a detailed study of coastal geography in the project Coastline. This project introduces children to the geography of coastal environments and provides children with the opportunity for in-depth coastal fieldwork.

Lower Key Stage 2

In Lower Key Stage 2, children begin with essential skills and knowledge projects (One Planet, Our World in Year 3 and Interconnected World in Year 4). Teaching these projects in Years 3 and 4 enables children to further develop their skills, knowledge and understanding of key geographical aspects and concepts and prepares them to study more thematic geography projects in the following term.

In the spring term of Year 3, children study the project Rocks, Relics and Rumbles, which explores physical features and geographical phenomena, including earthquakes and volcanoes. In contrast, in the spring term of Year 4, children carry out a detailed study of the physical features of mountains and rivers, which includes opportunities for in-depth fieldwork.

Upper Key Stage 2

In Upper Key Stage 2, children again begin with essential skills and knowledge projects (Investigating Our World in Year 5 and Our Changing World in Year 6). Teaching these projects in Years 5 and 6 enables children to develop their skills, knowledge and understanding of key geographical aspects and concepts and prepares them to study more thematic geography projects in the following term.

In the spring term of Year 5, children study the seasonal project Sow, Grow and Farm, which explores farming, agriculture and rural land use. In the spring term of Year 6, children study the polar regions in the project Frozen Kingdoms. The project includes an in-depth analysis of the characteristics of these regions, including environmental issues. Throughout the geography scheme, there is complete coverage of all national curriculum programmes of study.

History

The history projects are well sequenced to provide a coherent subject scheme that develops children's historical knowledge, skills and subject disciplines. Key aspects and concepts, such as chronology, cause and effect, similarity and difference, significance and hierarchy, are revisited throughout all projects and are developed over time. All projects also develop historical skills based on evidence and historical enquiry. The choice of historical periods follows the guidance set out in the national curriculum, with specific details relating to significant events and individuals chosen to present a rich and diverse account of British and world history. Where there are opportunities for making meaningful connections with other projects, history projects are sequenced accordingly. For example, the project Dynamic Dynasties is taught alongside the art and design project Taotie to give children a better all-round understanding of ancient Chinese arts and culture. All history projects are taught in the autumn and summer terms, with opportunities for schools to revisit historical concepts in some of the spring term geography projects.

Key Stage 1

In Year 1, children begin the autumn term by studying the project Childhood. This project builds on children's past experiences, including their family history and events within living memory, and works well as an introductory project. In the summer term, children study the project School Days. This project enables children to learn the history of their school and compare schooling in the Victorian period.

In the autumn term of Year 2, children extend their studies to explore a broader range of periods in the project Movers and Shakers. This project explores the concept of significance and the significant people that have greatly influenced history. In the summer term, children study the project Magnificent Monarchs. This project introduces children to the challenging concepts of power and monarchy in preparation for more complex historical topics in Key Stage 2. The projects studied in Key Stage 1 provide numerous opportunities for children to explore significant historical events, people and places in their locality

Lower Key Stage 2

In Year 3, children begin the autumn term by studying the chronology of British history in the project Through the Ages. This project teaches children about the significance of prehistoric periods and the changes in Britain from the Stone Age to the Iron Age. In the summer term, children continue to develop their knowledge of the chronology of British history in the project Emperors and Empires. This project teaches children about the Roman Empire, its invasion of Britain and Britain's ensuing Romanisation.

In the autumn term of Year 4, children resume their learning about British history in the project Invasion. This project teaches children about the Roman withdrawal and the invasion and settlement of the Anglo-Saxons and Vikings. This project concludes at 1066, which meets the guidance from the national curriculum for British history. In the summer term of Year 4, children begin their studies of ancient history by studying the overview project Ancient Civilisations. This project enables children to learn about the achievements of the earliest civilisations, including ancient Sumer, the Indus Valley civilisation and ancient Egypt.

Upper Key Stage 2

In the autumn term of Year 5, children continue to build their knowledge of ancient civilisations with an in-depth analysis of ancient China in the project Dynamic Dynasties. This project enables children to study the significance and influence of ancient China and its prowess and advancements in the written word, technology and metalwork. In the summer term, children further study ancient and world history in the project Groundbreaking Greeks. This project enables children to explore life in ancient Greece, including examining the achievements and influence of ancient Greece on the western world.

In the autumn term of Year 6, children study the more complex historical issues of enslavement, colonialism and power in the project Maafa. In this project, children explore a range of African kingdoms, including the Kingdom of Benin, and study Britain's role in the development, perpetuation and abolition of the slave trade. In the summer term of Year 6, children complete their historical studies with the project Britain at War. This project enables children to study the role war has played in Britain's history since 1066, focusing on the First and Second World Wars as crucial turning points in British history. Throughout the history scheme, there is complete coverage of all national curriculum programmes of study.

Science

Science programmes of study in the national curriculum are assigned to year groups. However, this is not compulsory and they must be covered before the end of the phase. Physics is not formally introduced until Key Stage 2. However, in Key Stage 1, children have opportunities to explore natural phenomena, such as shadows. In the Cornerstones Curriculum, the names of the science projects are matched to the national curriculum aspects, for example, Living things and their habitats and Earth and space. However, in Key Stage 1, the aspect of Animals, including humans has been separated so that children study humans before expanding to explore animals.

The science projects are sequenced to develop both children's substantive and declarative knowledge, and if possible, make meaningful links to other projects. For example, in Year 3, the projects Plant Nutrition and Reproduction and Light and Shadows are taught alongside the design and technology project Greenhouse and the art and design project Beautiful Botanicals. These links allow for children to embed their substantive knowledge in new and often real-life contexts. The sequencing of projects ensures that children have the substantive knowledge and vocabulary to comprehend subsequent projects fully. Each project's place in the year has also been carefully considered. For example, projects that involve growing plants or observing animals are positioned at a suitable time of year to give children the best possible opportunity to make first-hand observations. Within all the science projects, disciplinary knowledge is embedded within substantive content.

Key Stage 1
In Year 1, children start the autumn term with Everyday Materials, linking this learning to the design and technology project Shade and Shelter. In the Human Senses project, they learn about parts of the human body and those associated with the senses. In the spring project Seasonal Changes, they learn broadly about seasonal changes linked to weather, living things and day length. They revisit some of this learning in the following summer term project Plant Parts. They finish with the project Animal Parts, linking back to their knowledge about body parts and senses and identifying commonalities.

In Year 2, children begin the autumn term with the project Human Survival, learning about the survival needs of humans, before expanding to study animals within their habitats in the project Habitats. Building on learning from Year 1, children learn about the uses of materials in the spring project Uses of Materials and begin to understand changes of materials through simple physical manipulation, such as bending and twisting. The spring Plant Survival project also explores survival, with children observing what plants need to grow and stay healthy. Finally, in the project Animal Survival, children bring together learning from the autumn term, thinking about what animals need to survive.

Lower Key Stage 2
Having learned about human body parts, the senses and survival in Key Stage 1, children now focus on specific body systems and nutrition in Key Stage 2.

In the autumn term of Year 3, they learn about the skeletal and muscular system in the project Skeletal and Muscular Systems. This learning again links to other animals, with children identifying similarities and differences. Children also learn about healthy diets alongside the autumn term design and technology project Cook Well, Eatwell. In the spring term, properties of materials are revisited in the project Forces and Magnets, with children identifying magnetic materials and learning about the non-contact force of magnetism. They also begin to learn about contact forces, investigating how things move over surfaces. Science learning about rocks and soils is delivered through the geography project Rocks, Relics and Rumbles. Children begin to link structure to function in the summer Plant Nutrition and Reproduction project, identifying the plant parts associated with reproduction and water transport. Children finish the year with the project Light and Shadows, where they are explicitly introduced to the subject of light, with children learning about shadows and reflections, revisiting language from Key Stage 1, including opaque and transparent.

In the autumn term of Year 4, children learn about the digestive system, again making comparisons to other animals, in the project Digestive System. The second autumn term project Sound introduces the concept of sound, with children identifying how sounds are made and travel. They learn and use new vocabulary, such as pitch and volume, and identify properties of materials associated with these concepts. In the spring term project States of Matter, children learn about solids, liquids and gases and their characteristics. They understand how temperature drives change of state and link this learning to the project Misty Mountain, Winding River, in which children learn about the water cycle. Up to this point, children have had many opportunities for grouping and sorting living things. In the spring project Grouping and Classifying, children recognise this as ‘classification’ and explore classification keys. Finally, in the summer term, children study electricity by creating and recording simple circuits in the project Electrical Circuits and Conductors. They also build on

their knowledge of the properties of materials, identifying electrical conductors and insulators.

Upper Key Stage 2

In the autumn term of Year 5, children broaden their knowledge of forces, including gravity and air and water resistance, in the project Forces and Mechanisms. They revisit learning from design and technology projects, including Making It Move and Moving Mechanisms, to explore various mechanisms and their uses. Their knowledge of gravity supports the autumn term project Earth and Space, so they can understand the forces that shape planets and our solar system. They also develop their understanding of day and night, first explored in the Year 1 project Seasonal Changes. Having learned that animals and plants produce offspring in earlier projects and studied plant and animal life cycles in Sow, Grow and Farm, children now focus on the human life cycle and sexual reproduction in the spring term project Human Reproduction and Ageing. In the summer term project Properties and Changes of Materials, children revisit much of their prior learning about materials' properties and learn new properties, including thermal conductivity and solubility. To this point, children have learned much about reversible changes, such as melting and freezing, but now extend their learning to irreversible changes, including chemical changes.

In Year 6, the final body system children learn about is the circulatory system and its roles in transporting water, nutrients and gases in the autumn term project Circulatory System. Science learning about classification is delivered through the spring term geography project Frozen Kingdoms. In the spring term, children also build on their knowledge about electrical circuits from Year 4, now learning and recording standard symbols for circuit components and investigating the function of components and the effects of voltage on a circuit in the project Electrical Circuits and Components. In the summer project Light Theory, children recognise that light travels in straight lines from a source or reflector to the eye and explain the shape of shadows. Finally, in the project Evolution and Inheritance, children learn about inheritance and understand why offspring are not identical to their parents. They also learn about natural selection and how this can lead to the evolution of a species. Throughout the science scheme, there is complete coverage of all national curriculum programmes of study.