Year 4 Term 1- Knowledge and Skills

Curriculum Intent	*Attain an appreciation for literature, art, music within the breadth of the National Curriculum.*
Power of Reading Text	I Go Quiet Fly, Eagle, Fly!
Cornerstones Unit	Playlist
Companion project	Can We Block Sound?

	Knowledge	Skills
Science	• Volume is how loud or quiet a sound is. The harder an instrument is hit, plucked or blown, the stronger the vibrations and the louder the sound. • Pitch is how high or low a sound is. Parts of an instrument that are shorter, tighter or thinner produce high-pitched sounds. Parts of an instrument that are longer, looser or fatter produce low-pitched sounds. • When an instrument is played, the air around or inside it vibrates. These vibrations travel as a sound wave. Sound waves travel through a medium, such as air or water, to the ear. • A series circuit is a simple loop with only one path for the electricity to flow. A series circuit must be a complete loop to work and have a source of power from a battery or cell. • Electrical components include cells, wires, lamps, motors, switches and buzzers. Switches open and close a circuit and provide control. • Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected. • Questions can help us find out about the world and can be answered using scientific enquiry. • Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C), and metre sticks, rulers or trundle wheels (millimetres, centimetres, metres). • An observation involves looking closely at objects, materials and living things. Observations can be made regularly to identify changes over time. • Sounds are louder closer to the sound source and fainter as the distance from the sound source increases.	• Compare and find patterns in the volume of a sound, using a range of equipment, such as musical instruments. • Compare and find patterns in the pitch of a sound, using a range of equipment, such as musical instruments. • Explain how sounds are made and heard using diagrams, models, written methods or verbally. • Predict and describe whether a circuit will work based on whether or not the circuit is a complete loop and has a battery or cell. • Construct operational simple series circuits using a range of components and switches for control. • Use scientific vocabulary to report and answer questions about their findings based on evidence collected, draw simple conclusions and identify next steps, improvements and further questions. • Ask relevant scientific questions, independently, about the world around them and begin to identify how they can answer them. • Take accurate measurements in standard units, using a range of equipment. • Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. • Compare how the volume of a sound changes at different distances from the source.
Geography		
History		
Computing	• Manipulating a range of text, images, sound or video clips and animation may include changing their style, size, colour, effect, shape, location, or format. • Interacting regularly with hardware enables users to recognise common features and become confident in working with new or unfamiliar hardware. • Digital technology can be used in different ways and settings to achieve a specific goal, such as using data collection in the community and home to answer a classroom-based question.	• Manipulate a range of text, images, sound or video clips and animation for given purposes. • Use new and unfamiliar computing hardware. • Use digital technology in different ways in the classroom, home and community to achieve a set goal.
Design and Technology	• Design features are the aspects of a product's design that the designer would like to emphasise, such as the use of a particular material or feature that makes the product easier to use or more durable. • Evaluation can be done by considering whether the product does what it was designed to do, whether it has an attractive appearance, what changes were made during the making process and why the changes were made. Evaluation also includes suggesting improvements and explaining why they should be made. • Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.	• Investigate and identify the design features of a familiar product. • Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements. • Choose from a range of materials, showing an understanding of their different characteristics.
Art and Design	• Artists use sketching to develop an idea over time.	• Create a series of sketches over time to develop ideas on a theme or mastery of a technique.

Year 4 Term 2- Knowledge and Skills

Curriculum Intent	*Appreciate the benefits of diversity by understanding own and other's cultures and traditions.*
Power of Reading Text	African Tales Christmas week - It's a No-Money Day
Cornerstones Unit	Ancient Civilisations
Companion project	-

	Knowledge	Skills
Science		
Geography	• Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power. • Rivers transport materials in four ways. Solution is when minerals are dissolved and carried in the water. Suspension is when fine, light material is carried. Saltation is when small pebbles and stones are carried along the riverbed. Traction is when large boulders and rocks are rolled along the riverbed. • Different types of soil include clay, sandy, silty and loamy. • Significant mountain ranges include the Himalayas, Urals, Andes, Alps, Atlas, Pyrenees, Apennines, Balkans and Sierra Nevada. Significant rivers include the Mississippi, Nile, Thames, Amazon, Volga, Zambezi, Mekong, Ganges, Danube and Yangtze.	• Explain ways that settlements, land use or water systems are used in the UK and other parts of the world. • Describe and explain the transportation of materials by rivers. • Describe the properties of different types of soil. • Name, locate and explain the importance of significant mountains or rivers.
History	• The influences of Roman civilisation on Britain include the building of roads, houses and villas with technology, such as underfloor heating; the building of forts and fortified towns; the use of language and numbers in the form of Roman numerals and the spread of Christianity. • Key aspects of British history include the rise, fall and actions of the monarchy; improvements in technology; exploration; disease; the lives of the rich and poor and changes in everyday life. • The materials and decoration used to make an artefact can tell us about the skill of the craftworker and the status of the owner. The form can tell us how it was used. Some artefacts can also show us what people believed, what was important to them and how they spent their time. • Hierarchy structures in ancient civilisations include (from most to least powerful) a ruler; officials, nobles or priests; merchants, workers and peasants and slaves. • The features and achievements of the earliest civilisations include cities, government, forms of writing, numerical systems, calendars, architecture, art, religion, inventions and social structures. • The characteristics of the earliest civilisations include cities, government, language, writing, customs, numerical systems, calendars, architecture, art, religion, inventions and social structures, all of which have influenced the world over the last 5000 years. • The Viking invasion and Anglo-Saxon defence of England led to many conflicts. In AD 878, the Anglo-Saxon king, Alfred the Great, made peace with the Vikings, who settled in Danelaw in the east of England. Over time, the Anglo-Saxons defeated the remaining Viking rulers and the Vikings in England agreed to be ruled by an Anglo-Saxon king. • Relevant historical information can be presented as written texts, tables, diagrams, captions and lists. • Historical terms include abstract nouns, such as invasion and monarchy. • Historical artefacts can reveal much about the object's use or owner. For example, highly decorated artefacts made of precious materials and created by highly skilled craftsmen suggest the owner was wealthy and important, whereas simple objects made of readily available materials suggest the owner was poor and unimportant. • Bias is the act of supporting or opposing a person or thing in an unfair way. • A primary source is a document or artefact, which provides direct, first-hand evidence of an event, person or time in the past. Primary sources contain the life experiences, thoughts, opinions and beliefs of their writers or creators, which can affect the information included and the way that people and events have been depicted. • Characteristics of a civilisation include cities, government or leadership, forms of writing, numerical systems, calendars, architecture, art, religion, inventions and social structures. The form these characteristics take can be similar or contrasting across different civilisations. • Every significant historical event has a cause or a number of causes, such as the need for power and wealth, retaliation for past wrongs, the need to improve quality of life or the occurrence of natural disasters, such as earthquakes. The consequences are the outcomes of an event, such as changes in power, people being killed or displaced during war, improvements in quality of life or damage and destruction from a natural disaster. • A profile of a leader can include their significant achievements, the events in which they played a part, the opinions of others about the person and the positive or negative consequences of their actions. • Changes over time can happen rapidly or slowly and are affected by the desire for people to change, their beliefs, the availability of resources and technology, and social and economic circumstances. • counties of Kent, Sussex, Wessex, Middlesex and East Anglia. • Key changes and events of historical periods can be placed on a timeline, such as the dates of changes in leadership, key battles and invasions, achievements, scientific developments and deaths.	• Describe the 'Romanisation' of Britain, including the impact of technology, culture and beliefs. • Create an in-depth study of an aspect of British history beyond 1066. • Explain how artefacts provide evidence of everyday life in the past. • Describe the hierarchy and different roles in ancient civilisations. • Construct a narrative, chronological or non-chronological account of a past civilisation, focusing on their features and achievements. • Create an in-depth study of the characteristics and importance of a past or ancient civilisation or society (people, architecture, religion, culture, art, politics, hierarchy). • Describe the significance and impact of power struggles on Britain. • Present a thoughtful selection of relevant information in a historical report, fictional narrative, in-depth study or by answering a range of historical questions. • Use more complex historical terms to explain and present historical information. • Explain how the design, decoration and materials used to make an artefact can provide evidence of the wealth, power and status of the object's owner. • Identify bias in primary and secondary sources. • Interpret a primary source and understand how the context in which it was written influences the writer's viewpoint. • Compare and contrast two civilisations. • Explain in detail the multiple causes and effects of significant events. • Construct a profile of a significant leader using a range of historical sources. • Answer and ask historically valid questions about changes over time and suggest or plan ways to answer them • Sequence significant dates about events within a historical time period on historical timelines.
Computing		
Design and Technology		
Art and Design		

Year 4 Term 3 - Knowledge and Skills

Curriculum Intent	*Attain an appreciation for literature, art, music within the breadth of the National Curriculum.*
Power of Reading Text	Werewolf Clubs Rules
Cornerstones Unit	Burps, Bottoms and Bile
Companion project	

	Knowledge	Skills
Science	• The digestive system is responsible for digesting food and absorbing nutrients and water. The main parts of the digestive system are the mouth, oesophagus, stomach, small intestines, large intestines and rectum. The mouth starts digestion by chewing food and mixing it with saliva. The oesophagus transports the chewed food to the stomach, where it mixes with stomach acid and gets broken down into smaller pieces. In the small intestine, nutrients from the food are absorbed by the body. In the large intestine, water is absorbed by the body. The remaining undigested waste is stored in the rectum before excretion through the anus. • Regular teeth brushing, limiting sugary foods and visiting the dentist are important for good oral hygiene. • Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected. • Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams. • Scientific enquiries can be set up and carried out by following or planning a method. A prediction is a statement about what might happen in an investigation, based on some prior knowledge or understanding. A fair test is one in which only one variable is changed and all others remain constant. • An observation involves looking closely at objects, materials and living things. Observations can be made regularly to identify changes over time. • There are four different types of teeth: incisors, canines, premolars and molars. Incisors are used for cutting. Canines are used for tearing. Premolars and molars are used for grinding and chewing. Carnivores, herbivores and omnivores have characteristic types of teeth. Herbivores have many large molars for grinding plant material. Carnivores have large canines for killing their prey and tearing meat.	• Describe the purpose of the digestive system, its main parts and each of their functions. • Describe what damages teeth and how to look after them. • Use scientific vocabulary to report and answer questions about their findings based on evidence collected, draw simple conclusions and identify next steps, improvements and further questions. • Gather, record, classify and present observations and measurements in a variety of ways (pictorial representations, timelines, diagrams, keys, tables, charts and graphs). • Begin to independently plan, set up and carry out a range of comparative and fair tests, making predictions and following a method accurately. • Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. • Identify the four different types of teeth in humans and other animals, and describe their functions.
Geography		
History		
Computing	• Manipulating a range of text, images, sound or video clips and animation may include changing their style, size, colour, effect, shape, location or format. • Digital technology can be used in different ways and settings to achieve a specific goal, such as using data collection in the community and home to answer a classroom-based question.	• Manipulate a range of text, images, sound or video clips and animation for given purposes. • Use digital technology in different ways in the classroom, home and community to achieve a set goal.
Design and Technology	• Annotated sketches and exploded diagrams show specific parts of a design, highlight sections or show functions. They communicate ideas in a visual, detailed way. • Evaluation can be done by considering whether the product does what it was designed to do, whether it has an attractive appearance, what changes were made during the making process and why the changes were made. Evaluation also includes suggesting improvements and explaining why they should be made. • Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. • Cooking techniques include baking, boiling, frying, grilling and roasting. • Healthy snacks include fresh or dried fruit and vegetables, nuts and seeds, rice cakes with low-fat cream cheese, homemade popcorn or chopped vegetables with hummus. A healthy packed lunch might include a brown or wholemeal bread sandwich containing eggs, meat, fish or cheese, a piece of fresh fruit, a low-sugar yoghurt, rice cake or popcorn and a drink, such as water or semi-skimmed milk. • A comparison table can be used to compare products by listing specific criteria on which each product can be judged or scored.	• Use annotated sketches and exploded diagrams to test and communicate their ideas. • Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements. • Choose from a range of materials, showing an understanding of their different characteristics. • Identify and use a range of cooking techniques to prepare a simple meal or snack. • Design a healthy snack or packed lunch and explain why it is healthy. • Create and complete a comparison table to compare two or more products.
Art and Design		

Year 4 Term 4- Knowledge and Skills

Curriculum Intent	*Sustain and improve the environment, locally and globally.*
Power of Reading Text	Tin Forest
Cornerstones Unit	Misty Mountain, Winding River
Companion project	What Conducts Electricity?

	Knowledge	Skills
Science	• The water cycle has four stages: evaporation, condensation, precipitation and collection. Water in lakes, rivers and streams is warmed by the Sun, causing the water to evaporate and rise into the air as water vapour. As the water vapour rises, it cools and condenses to form water droplets in clouds. The clouds become full of water until the water falls back to the ground as precipitation (rain, hail, snow and ice). The fallen water collects back in lakes, rivers and streams. Evaporation and condensation are caused by temperature changes. • Electrical components include cells, wires, lamps, motors, switches and buzzers. Switches open and close a circuit and provide control. • Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected. • Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams. • Scientific enquiries can be set up and carried out by following or planning a method. A prediction is a statement about what might happen in an investigation, based on some prior knowledge or understanding. A fair test is one in which only one variable is changed and all others remain constant. • An observation involves looking closely at objects, materials and living things. Observations can be made regularly to identify changes over time. • Electrical conductors allow electricity to flow through them, whereas insulators do not. Common electrical conductors are metals. Common insulators include wood, glass, plastic and rubber. • An adaptation helps an animal or plant survive in its habitat. If living things are unable to adapt to changes within their habitat, they are at risk of becoming extinct. • Humans can affect habitats in negative ways, such as littering, pollution and land development, or positive ways, such as garden ponds, bird boxes and wildflower areas.	• Describe the water cycle using words or diagrams and explain the part played by evaporation and condensation. • Construct operational simple series circuits using a range of components and switches for control. • Use scientific vocabulary to report and answer questions about their findings based on evidence collected, draw simple conclusions and identify next steps, improvements and further questions. • Gather, record, classify and present observations and measurements in a variety of ways (pictorial representations, timelines, diagrams, keys, tables, charts and graphs). • Begin to independently plan, set up and carry out a range of comparative and fair tests, making predictions and following a method accurately. • Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. • Describe materials as electrical conductors or insulators. • Explain how adaptations help living things to survive in their habitat. • Describe how environments can change due to human and natural influences and the impact this can have on living things.
Geography	• Human features can be interconnected by function, type and transport links. • Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power. • Water cannot be made. It is constantly recycled through a process called the water cycle. The four stages of the water cycle are evaporation, condensation, precipitation and collection. During the water cycle, water changes state due to heating and cooling. • An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. • Secondary data includes information gathered by geographical reports, surveys, maps, research, books and the internet. • Saltation is when small pebbles and stones are carried along the riverbed. Traction is when large boulders and rocks are rolled along the riverbed. • Different types of soil include clay, sandy, silty and loamy. • Mountains form over millions of years. They are made when the Earth's tectonic plates push together or move apart. Mountains are also formed when magma underneath the Earth's crust pushes large areas of land upwards. There are five types of mountain: fold, fault-block, volcanic, dome and plateau. • Altitudinal zonation describes the different climates and types of wildlife at different altitudes on mountains. Examples include forests that grow at low altitudes and support a wide variety of plants and animals, tundra that is found at higher altitudes and supports plants and animals that are adapted to harsher environments, and the summits of mountains, which are usually covered in ice and snow and don't support any life. • The North American continent includes the countries of the USA, Canada and Mexico as well as the Central American countries of Guatemala, Honduras, Nicaragua, Costa Rica and Panama. The South American continent includes the countries of Brazil, Argentina, Chile, Colombia, Peru, Venezuela, Uruguay, Ecuador, Bolivia and Paraguay. • Significant rivers of the UK include the Thames, Severn, Trent, Dee, Tyne, Ouse and Lagan. Significant mountains and mountain ranges include Ben Nevis, Snowdon, Helvellyn, Pen y Fan, the Scottish Highlands and the Pennines. • Topography is the arrangement of the natural and artificial physical features of an area. • The four cardinal directions are north (N), east (E), south (S) and west (W), which are at 90° angles on the compass rose. The four intercardinal (or ordinal) directions are halfway between the cardinal directions: north-east (NE), south-east (SE), south-west (SW) and north-west (NW). • A six-figure grid reference contains six numbers and is more precise than a four-figure grid reference. The first three figures are called the easting and are found along the top and bottom of a map. The second three figures are called the northing and are found up both sides of a map. Six-figure grid references give detailed information about locations on a map. • A physical feature is one that forms naturally and can change over time due to physical processes, such as erosion and weathering. Physical features include rivers, forests, hills, mountains and cliffs. An aspect of a physical feature might be the type of mountain, such as dome or volcanic, or the type of forest, such as coniferous or broad-leaved. • Significant mountain ranges include the Himalayas, Urals, Andes, Alps, Atlas, Pyrenees, Apennines, Balkans and Sierra Nevada. Significant rivers include the Mississippi, Nile, Thames, Amazon, Volga, Zambezi, Mekong, Ganges, Danube and Yangtze. • Rivers, seas and oceans can transform a landscape through erosion, deposition and transportation.	• Describe a range of human features and their location and explain how they are interconnected. • Explain ways that settlements, land use or water systems are used in the UK and other parts of the world. • Use specific geographical vocabulary and diagrams to explain the water cycle. • Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping. • Collect and analyse primary and secondary data, identifying and analysing patterns and suggesting reasons for them. • Describe and explain the transportation of materials by rivers. • Describe the properties of different types of soil. • Identify, describe and explain the formation of different mountain types. • Describe altitudinal zonation on mountains. • Locate the countries and major cities of North, Central and South America on a world map, atlas or globe. • Create a detailed study of geographical features including hills, mountains, coasts and rivers of the UK. • Identify the topography of an area of the UK using contour lines on a map. • Use the eight points of a compass, four and six-figure grid references, symbols and a key to locate and plot geographical places and features on a map. • Use four or six-figure grid references and keys to describe the location of objects and places on a map. • Describe and compare aspects of physical features. • Name, locate and explain the importance of significant mountains or rivers. • Explain how the physical processes of a river, sea or ocean have changed a landscape over time.
History		
Computing		
Design and Technology	• Design features are the aspects of a product's design that the designer would like to emphasise, such as the use of a particular material or feature that makes the product easier to use or more durable. • Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.	• Investigate and identify the design features of a familiar product. • Choose from a range of materials, showing an understanding of their different characteristics.
Art and Design		

Year 4 Term 5 - Knowledge and Skills

Curriculum Intent	*Appreciate the benefits of diversity by understanding own and other's cultures and traditions.*
Power of Reading Text	Saving the Butterfly
Cornerstones Unit	Invasion
Companion project	Digestive System

	Knowledge	Skills
Science	• The digestive system is responsible for digesting food and absorbing nutrients and water. The main parts of the digestive system are the mouth, oesophagus, stomach, small intestines, large intestines and rectum. The mouth starts digestion by chewing food and mixing it with saliva. The oesophagus transports the chewed food to the stomach, where it mixes with stomach acid and gets broken down into smaller pieces. In the small intestine, nutrients from the food are absorbed by the body. In the large intestine, water is absorbed by the body. The remaining undigested waste is stored in the rectum before excretion through the anus. • Regular teeth brushing, limiting sugary foods and visiting the dentist are important for good oral hygiene. • Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected. • Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams. • Questions can help us find out about the world and can be answered using scientific enquiry. • Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C), and metre sticks, rulers or trundle wheels (millimetres, centimetres, metres). • Scientific enquiries can be set up and carried out by following or planning a method. A prediction is a statement about what might happen in an investigation, based on some prior knowledge or understanding. A fair test is one in which only one variable is changed and all others remain constant. • An observation involves looking closely at objects, materials and living things. Observations can be made regularly to identify changes over time. • There are four different types of teeth: incisors, canines, premolars and molars. Incisors are used for cutting. Canines are used for tearing. Premolars and molars are used for grinding and chewing. Carnivores, herbivores and omnivores have characteristic types of teeth. Herbivores have many large molars for grinding plant material. Carnivores have large canines for killing their prey and tearing meat. • Food chains show what animals eat within a habitat and how energy is passed on over time. All food chains start with a producer, which is typically a green plant. The producer is eaten by a primary consumer (prey), which is eaten by a secondary consumer (prey), which is eaten by a tertiary consumer. All food chains end with a top or apex predator. Changes within a food chain, such as an abundance or lack of one food type, have an impact on the entire food chain.	• Describe the purpose of the digestive system, its main parts and each of their functions. • Describe what damages teeth and how to look after them. • Gather, record, classify and present observations and measurements in a variety of ways (pictorial representations, timelines, diagrams, keys, tables, charts and graphs). • Ask relevant scientific questions, independently, about the world around them and begin to identify how they can answer them. • Take accurate measurements in standard units, using a range of equipment. • Begin to independently plan, set up and carry out a range of comparative and fair tests, making predictions and following a method accurately. • Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. • Identify the four different types of teeth in humans and other animals, and describe their functions. • Construct and interpret a variety of food chains and webs to show interdependence and how energy is passed on over time.
Geography	• An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area.	• Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping.
History	• The influences of Roman civilisation on Britain include the building of roads, houses and villas with technology, such as underfloor heating; the building of forts and fortified towns; the use of language and numbers in the form of Roman numerals and the spread of Christianity. • Key aspects of British history include the rise, fall and actions of the monarchy; improvements in technology; exploration; disease; the lives of the rich and poor and changes in everyday life. • The materials and decoration used to make an artefact can tell us about the skill of the craftworker and the status of the owner. The form can tell us how it was used. Some artefacts can also show us what people believed, what was important to them and how they spent their time. • The features and achievements of the earliest civilisations include cities, government, forms of writing, numerical systems, calendars, architecture, art, religion, inventions and social structures. • The characteristics of the earliest civilisations include cities, government, language, writing, customs, numerical systems, calendars, architecture, art, religion, inventions and social structures, all of which have influenced the world over the last 5000 years. • The Viking invasion and Anglo-Saxon defence of England led to many conflicts. In AD 878, the Anglo-Saxon king, Alfred the Great, made peace with the Vikings, who settled in Danelaw in the east of England. Over time, the Anglo-Saxons defeated the remaining Viking rulers and the Vikings in England agreed to be ruled by an Anglo-Saxon king. • Relevant historical information can be presented as written texts, tables, diagrams, captions and lists. • Historical terms include abstract nouns, such as invasion and monarchy. • Historical artefacts can reveal much about the object's use or owner. For example, highly decorated artefacts made of precious materials and created by highly skilled craftsmen suggest the owner was wealthy and important, whereas simple objects made of readily available materials suggest the owner was poor and unimportant. • Bias is the act of supporting or opposing a person or thing in an unfair way. • A primary source is a document or artefact, which provides direct, first-hand evidence of an event, person or time in the past. Primary sources contain the life experiences, thoughts, opinions and beliefs of their writers or creators, which can affect the information included and the way that people and events have been depicted. • A past event or society can impact a local settlement in several ways, including the layout and use of land in the settlement; changes to the number of people who lived or worked there over time; the creation of human features, such as canals, castles or factories; place names and language. • Characteristics of a civilisation include cities, government or leadership, forms of writing, numerical systems, calendars, architecture, art, religion, inventions and social structures. The form these characteristics take can be similar or contrasting across different civilisations. • Every significant historical event has a cause or a number of causes, such as the need for power and wealth, retaliation for past wrongs, the need to improve quality of life or the occurrence of natural disasters, such as earthquakes. The consequences are the outcomes of an event, such as changes in power, people being killed or displaced during war, improvements in quality of life or damage and destruction from a natural disaster. • A profile of a leader can include their significant achievements, the events in which they played a part, the opinions of others about the person and the positive or negative consequences of their actions. • Changes over time can happen rapidly or slowly and are affected by the desire for people to change, their beliefs, the availability of resources and technology, and social and economic circumstances. • Individual events linked to themes, such as the rise and fall of the monarchy, uprisings and rebellions, great inventions and crime and punishment, all show changes in British life over time. • Anglo-Saxons and Scots from Ireland invaded Britain to fight and capture land and goods because the Romans had left. Anglo-Saxons also wanted to find farmland after flooding in Scandinavia. They wanted to make new homes and settlements and eventually settled in kingdoms, first across the south-east and eastern England and then across the whole country. These kingdoms later became the counties of Kent, Sussex, Wessex, Middlesex and East Anglia. • Key changes and events of historical periods can be placed on a timeline, such as the dates of changes in leadership, key battles and invasions, achievements, scientific developments and deaths.	• Describe the 'Romanisation' of Britain, including the impact of technology, culture and beliefs. • Create an in-depth study of an aspect of British history beyond 1066. • Explain how artefacts provide evidence of everyday life in the past. • Construct a narrative, chronological or non-chronological account of a past civilisation, focusing on their features and achievements. • Create an in-depth study of the characteristics and importance of a past or ancient civilisation or society (people, architecture, religion, culture, art, politics, hierarchy). • Describe the significance and impact of power struggles on Britain. • Present a thoughtful selection of relevant information in a historical report, fictional narrative, in-depth study or by answering a range of historical questions. • Use more complex historical terms to explain and present historical information. • Explain how the design, decoration and materials used to make an artefact can provide evidence of the wealth, power and status of the object's owner. • Identify bias in primary and secondary sources. • Interpret a primary source and understand how the context in which it was written influences the writer's viewpoint. • Describe and explain the impact of a past society on a local settlement or community. • Compare and contrast two civilisations. • Explain in detail the multiple causes and effects of significant events. • Construct a profile of a significant leader using a range of historical sources. • Answer and ask historically valid questions about changes over time and suggest or plan ways to answer them • Describe a series of significant events, linked by a common theme, that show changes over time in Britain. • Explain the cause, consequence and impact of invasion and settlement in Britain. • Sequence significant dates about events within a historical time period on historical timelines.
Computing		
Design and Technology		
Art and Design		

Year 4 Term 6 - Knowledge and Skills

Curriculum Intent	*Challenge injustice and strive to live peacefully with others.*
Power of Reading Text	The Bluest of Blues
Cornerstones Unit	Blue Abyss
Companion project	Are all liquids runny?

	Knowledge	Skills
Science	• Heating or cooling materials can bring about a change of state. This change of state can be reversible or irreversible. The temperature at which materials change state varies depending on the material. Water changes state from solid (ice) ⇌ liquid (water) at 0°C and from liquid (water) ⇌ gas (water vapour) at 100°C. The process of changing from a solid to liquid is called melting. The reverse process of changing from a liquid to a solid is called freezing. The process of changing from a liquid to a gas is called evaporation. The reverse process of changing from a gas to a liquid is called condensation. • Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected. • Data can be recorded and displayed in different ways, including tables, charts, graphs, keys and labelled diagrams. • Questions can help us find out about the world and can be answered using scientific enquiry. • Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C), and metre sticks, rulers or trundle wheels (millimetres, centimetres, metres). • Scientific enquiries can be set up and carried out by following or planning a method. A prediction is a statement about what might happen in an investigation, based on some prior knowledge or understanding. A fair test is one in which only one variable is changed and all others remain constant. • An observation involves looking closely at objects, materials and living things. Observations can be made regularly to identify changes over time. • Materials can be grouped according to whether they are solids, liquids or gases. Solids stay in one place and can be held. Some solids can be squashed, bent, twisted and stretched. Examples of solids include wood, metal, plastic and clay. Liquids move around (flow) easily and are difficult to hold. Liquids take the shape of the container in which they are held. Examples of liquids include water, juice and milk. Gases spread out to fill the available space and cannot be held. Examples of gases include oxygen, helium and carbon dioxide. Air is a mixture of gases. • Scientists classify living things according to shared characteristics. Animals can be divided into six main groups: mammals, reptiles, amphibians, birds, fish and invertebrates. These groups can be further subdivided. Classification keys are scientific tools that aid the identification of living things. • Food chains show what animals eat within a habitat and how energy is passed on over time. All food chains start with a producer, which is typically a green plant. The producer is eaten by a primary consumer (prey), which is eaten by a secondary consumer (prey), which is eaten by a tertiary consumer. All food chains end with a top or apex predator. Changes within a food chain, such as an abundance or lack of one food type, have an impact on the entire food chain. • An adaptation helps an animal or plant survive in its habitat. If living things are unable to adapt to changes within their habitat, they are at risk of becoming extinct. • Humans can affect habitats in negative ways, such as littering, pollution and land development, or positive ways, such as garden ponds, bird boxes and wildflower areas. • Habitats change over time, either due to natural or human influences. Natural influences include extreme or unseasonable weather. Human influences include habitat destruction or pollution. These changes can pose a risk to animals and plants that live in the habitat.	• Observe and explain that some materials change state when they are heated or cooled and measure or research the temperature in degrees Celsius (˚C) at which materials change state. • Use scientific vocabulary to report and answer questions about their findings based on evidence collected, draw simple conclusions and identify next steps, improvements and further questions. • Gather, record, classify and present observations and measurements in a variety of ways (pictorial representations, timelines, diagrams, keys, tables, charts and graphs). • Ask relevant scientific questions, independently, about the world around them and begin to identify how they can answer them. • Take accurate measurements in standard units, using a range of equipment. • Begin to independently plan, set up and carry out a range of comparative and fair tests, making predictions and following a method accurately. • Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. • Group and sort materials into solids, liquids or gases. • Compare, sort and group living things from a range of environments, in a variety of ways, based on observable features and behaviour. • Construct and interpret a variety of food chains and webs to show interdependence and how energy is passed on over time. • Explain how adaptations help living things to survive in their habitat. • Describe how environments can change due to human and natural influences and the impact this can have on living things. • Explain how unfamiliar habitats, such as a mountain or ocean, can change over time and what influences these changes.
Geography	• Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power. • An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. • Fieldwork techniques, such as sketch maps, data collection and digital technologies, can provide evidence to support and answer a geographical hypothesis. • The Tropic of Cancer is 23 degrees north of the equator and Tropic of Capricorn is 23 degrees south of the equator.	• Explain ways that settlements, land use or water systems are used in the UK and other parts of the world. • Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping. • Investigate a geographical hypothesis using a range of fieldwork techniques. • Identify the location of the Tropics of Cancer and Capricorn on a world map.
History	• The influences of Roman civilisation on Britain include the building of roads, houses and villas with technology, such as underfloor heating; the building of forts and fortified towns; the use of language and numbers in the form of Roman numerals and the spread of Christianity. • Key aspects of British history include the rise, fall and actions of the monarchy; improvements in technology; exploration; disease; the lives of the rich and poor and changes in everyday life. The materials and decoration used to make an artefact can tell us about the skill of the craftworker and the status of the owner. The form can tell us how it was used. Some artefacts can also show us what people believed, what was important to them and how they spent their time. • Relevant historical information can be presented as written texts, tables, diagrams, captions and lists.	• Describe the 'Romanisation' of Britain, including the impact of technology, culture and beliefs. • Create an in-depth study of an aspect of British history beyond 1066. • Explain how artefacts provide evidence of everyday life in the past. • Present a thoughtful selection of relevant information in a historical report, fictional narrative, in-depth study or by answering a range of historical questions.
Computing	• Manipulating a range of text, images, sound or video clips and animation may include changing their style, size, colour, effect, shape, location or format. • Interacting regularly with hardware enables users to recognise common features and become confident in working with new or unfamiliar hardware. • New computing software commonly has features that should be familiar to users, such as icons or terminology. • An input device receives information about the outside world, such as light level, temperature or sound level, and sends it to a computer. This information can be tracked over time using a program or app. • Digital technology can be used in different ways and settings to achieve a specific goal, such	• Manipulate a range of text, images, sound or video clips and animation for given purposes. • Use new and unfamiliar computing hardware. • Apply computing skills to use new computing software. • Log light level, temperature or sound level using a program or app, over a period of time. • Use digital technology in different ways in the classroom, home and community to achieve a set goal.

	as using data collection in the community and home to answer a classroom based question.	
Design and Technology		
Art and Design	• Art can be developed that depicts the human form to create a narrative. • Materials, techniques and visual elements, such as line, tone, shape, pattern, colour and form, can be combined to create a range of effects. • Artists use sketching to develop an idea over time. • Constructive feedback highlights strengths and weaknesses and provides information and instructions aimed at improving one or two aspects of the artwork, which will improve the overall piece. • Techniques used to create a 3-D form from clay include coiling, pinching, slab construction and sculpting. Carving, slip and scoring can be used to attach extra pieces of clay. Mark making can be used to add detail to 3-D forms. • Pen and ink create dark lines that strongly contrast with white paper. Pen and ink techniques include hatching (drawing straight lines in the same direction to fill in an area), cross-hatching (layering lines of hatching in different directions), random lines (drawing lines of a variety of shapes and lengths) and stippling (using small dots). Light tones are created when lines or dots are drawn further apart and dark tones are created when lines or dots are drawn closer together. • Natural patterns from weather, water or animals skins are often used as a subject matter.	• Explore and develop three-dimensional art that uses the human form, using ideas from contemporary or historical starting points. • Develop techniques through experimentation to create different types of art. • Create a series of sketches over time to develop ideas on a theme or mastery of a technique. • Give constructive feedback to others about ways to improve a piece of artwork. • Use clay to create a detailed or experimental 3-D form. • Use the properties of pen, ink and charcoal to create a range of effects in drawing. • Represent the detailed patterns found in natural phenomena, such as water, weather or animal skins.