Year 4 Curriculum Coverage

Art

	Using Sketchbooks	Drawing, painting and sculpture	Study of great artists
	• *create sketch books to record their observations and use them to review and revisit ideas*	• *improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]*	• *great artists, architects and designers in history*
Year 4	• Use sketchbooks to help create body shapes and movement • use sketchbooks to experiment with different texture and tone	• know how to show body shapes and movement in sketches, drawings and paintings • know how to use marks and lines to show texture in art. • know how to use line, tone, shape and colour to represent figures and forms in movement • know how to print using different media, materials and layers • know how to sculpt clay and other mouldable materials. • create 3D art using mixed media • know how to create digital images using a range of tools and effects	• experiment with the styles used by other artists. • explain some of the features of art from historical periods and cultures. • know how different artists developed their specific techniques
Artists/ Themes	Egyptians, Aerial Views, Rainforests, Rousseau, Mosaics, Bedford Modern Art Competition.		

Computing

Computing: Key Stage 2

	Search engines	Using programs	Safe use
Year 4	*Pupils should be taught to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content*	*Pupils should be taught to 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*	*Pupils should be taught to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact*
	• select and use software to accomplish given goals Cross-Curricular (presentation slides, photographs)	• produce a piece of animation including sound ilearn2 – Animation – Pupil Activity 5	• recognise acceptable and unacceptable behaviour using technology ilearn2 – e-safety Internet safety day

	Create programs	Develop programs	Reasoning	Networks
	Pupils should be taught to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	*Pupils should be taught to use sequence, selection, and repetition in programs; work with variables and various forms of input and output*	*Pupils should be taught to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs*	*Pupils should be taught to 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*
	• give an 'on-screen' robot specific instructions that takes them from A to B Espresso Coding (Unit 4a&4b)	• experiment with variables to control models Espresso Coding (Unit 4a&4b)	• make an accurate prediction and explain why they believe something will happen (linked to programming) Espresso Coding (Unit 4a&4b)	• know how to search for specific information and know which information is useful and which is not Cross-curricular learning (Romans, Ancient Egyptians)

Design and Technology

	Designing	Making	Evaluating	Technical Knowledge	Food Technology
	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*	*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 wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities*	*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*	*apply their understanding of how to strengthen, stiffen and reinforce more complex structures* *understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]* *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.*	*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*
Year 4	• use ideas from other people when designing • produce a plan and explain it • persevere and adapt work when original ideas do not work • communicate ideas in a range of ways, including by sketches and drawings which are annotated	• know which tools to use for a particular task and show knowledge of handling the tool • know which material is likely to give the best outcome • measure accurately	• evaluate and suggest improvements for design • evaluate products for both their purpose and appearance • explain how the original design has been improved • present a product in an interesting way	• links scientific knowledge by using lights, switches or buzzers • use electrical systems to enhance the quality of the product	• know how to be both hygienic and safe when using food • bring a creative element to the food product being designed

French

	Speaking and Listening	Reading	Writing
	- listen attentively to spoken language and show understanding by joining in and responding - explore the patterns and sounds of language through songs and rhymes - 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 - describe people, places, things and actions - present ideas and information orally to a range of audiences appreciate stories, songs, poems and rhymes in the language	link the spelling, sound and meaning of words - develop accurate pronunciation and intonation so that others understand when they are reading aloud - read carefully and show understanding of words, phrases and simple writing	- describe people, places, things and actions - 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
	Understand basic grammar appropriate to the language being studied, including: 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.		
Year 4	- name and describe people, a place, an object, a feeling or an action - have a short conversation of 3-4 exchanges - answer everyday questions with learned phrases and sentences - speak using phrases and full sentences - learn songs and rhymes by heart	- link sounds to letters - read and understand phrases and short sentences using familiar language - use correct pronunciation for familiar words, beginning to recognise some pronunciation rules e.g. accents	- write short familiar phrases from memory with correct spelling - adapt phrases using new words - write 2-3 short sentences on a familiar topic, using a model - use a bilingual dictionary or glossary to research words

Geography

	Location Knowledge	Place Knowledge	Human and Physical Geography
	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. Name and locate counties and cities of the UK, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coats and rivers) and land use patterns. Understand how some of these aspects have changed over time. – Bedford Day Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, Prime/Greenwich Meridian and time zones (including day and night)	Understand geographical similarities and differences through the study of human and physical geography of: - a region in the UK - a region in a European Country - a region within North or South America	Describe and understand key aspects of: - physical geography including climate zones, biomes, vegetation belts, rivers, mountains, volcanoes, earthquakes and the water cycle - human geography, including types of settlement and land use, economic activity (including trade links) and the natural distribution of natural resources (including energy, food, minerals and water).

| Year 4 | Roman Empire:
Locate the World's countries, using maps to focus on: North and South America; Italy (Roman Empire); Egypt
Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, Tropics of Cancer and Capricorn
Name and locate cities of the UK (Roman names) concentrating on their environmental regions, key physical and human characteristics, countries and major cities. | Rainforest:
Understand geographical similarities and differences through the study of physical geography of:
- a region within North or South America
Roman/Celts:
Understand geographical similarities and differences through the study of human geography of:
- a region in the UK | Describe and understand key aspects of:
- physical geography including climate zones, biomes, vegetation belts, rivers and the water cycle
- human geography, including types of settlement and land use (Roman and Celt houses), economic activity (including trade links) (Rainforest) |

	Geographical Skills and Fieldwork
	Use maps, atlases, globes and digital mapping to locate countries and describe features studied To build their knowledge of the UK and the wider world: - Use the eight points of the compass - Use four and six figure grid references - Use symbols and keys - Use Ordnance Survey maps – Bedford focused days Use fieldwork to: - Observe, measure and record the human and physical features in the local area using a range of methods including sketch maps, plans, graphs and digital technologies – Bedford focused days
Year 4	**Geographical Skills** Use maps, atlases and digital mapping to locate countries and describe features studied To build their knowledge of the UK and the wider world: - Use the eight points of the compass - Use four figure grid references (Maths) - Use symbols and keys **Fieldwork** Use fieldwork to: - Observe, measure and record the human and physical features in the local area using a range of methods including sketch maps, plans, graphs and digital technologies

History

	Stone Age to 1066 (Chronology)	Beyond 1066	Local Study	Ancient Ancients Approx. 300 years ago	Civilisations 1000 years ago	Ancient Greece
	Stone Age to Iron Age *Romans* *Anglo-Saxons* *Vikings*	*An aspect or theme of British history* *Victorians*	*A local study linked to one of the periods covered in column 1 OR A local study that could extend beyond 1066*	*Ancient Eygptians in depth* *Ancient Sumer, Indus Valley and Shang Dynasty overview*	*Mayans*	*Greek life and influence on Western world*
Year 4	Changes in Britain from the Stone Age to the Iron Age • Celts to Romans The Roman Empire and its impact on Britain • Julius Caesar's attempted invasion in 55-54 BC • the Roman Empire by AD 42 and the power of its army • successful invasion by Claudius and conquest, including Hadrian's Wall • British resistance, for example, Boudica • The legacy Roman culture (art, architecture or literature	World War One Remembrance	Bedford and Kempston Humanities Day - Food - People - Location - Transport - Migration - Buildings - Features (river)	The achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of Ancient Egypt		

Music

	Performing	Compose	Listen
	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*
Year 4	• sing songs from memory with accurate pitch • perform as a group, taking different parts	• use notation to record compositions in a small group or individually • improvise with a known piece of music, given appropriate notes	• recognise and use silence in music
	Use and understand	**Appreciate**	**History of music**
	use and understand staff and other musical notations	*appreciate and understand a wide range of high-quality music drawn from different traditions and from great composers and musicians*	*develop an understanding of the history of music*
Year 4	• use notation to record and follow short sequences	• identify and describe the different distinct styles and purposes of music	• name a classical composer • experience and describe the music of a range of classical composers from different periods

PE

	Athletics	Competitive Games	Gymnastics
	use running, jumping, throwing and catching in isolation and in combination *develop flexibility, strength, technique, control and balance*	*play competitive games, modified where appropriate [cricket, dodgeball, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending*	*develop flexibility, strength, technique, control and balance*
Year 4	• sprint over a short distance and show stamina when running over a long distance • jump in different ways • throw in different ways and hit a target, when needed	• throw and catch accurately with one hand • hit a ball accurately with control • vary tactics and adapt skills depending on what is happening in a game	• move in a controlled way • include change of speed and direction in a sequence • work with a partner to create, repeat and improve a sequence with at least three phases

	Dance	Outdoor and Adventurous Activity	Evaluate
	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*
Year 4	• take the lead when working with a partner or group • use dance to communicate an idea	• can work together to create simple plans and maps, orientate to North and follow map markers • can work together to follow trails and assess risks	• provide support and advice to others in gymnastics and dance • be prepared to listen to the ideas of others

Science

Year 4				
Biology		**Chemistry**	**Physics**	
Animals, including humans	**All living things and their habitats**	**States of Matter**	**Electricity**	**Sound**
• *Digestive system* • *Teeth* • *Food chains*	• *Grouping living things* • *Classification keys* • *Adaptation of living things*	• *Compare and group materials* • *Solids, liquids and gases* • *Changing state* • *Water cycle*	• *Uses of electricity* • *Simple circuits and switches* • *Conductors and insulators*	• *How sounds are made* • *Sound vibrations* • *Pitch and Volume*
• Identify and name the parts of the human digestive system • Know the functions of the organs in the human digestive system • Identify and know the different types of human teeth • Know the functions of different human teeth • Use and construct food chains to identify producers, predators and prey	• Use classification keys to group, identify and name living things • Know how changes to an environment could endanger living things • Group materials based on their state of matter (solid, liquid, gas	• Know the temperature at which materials change state • Know about and explore how some materials can change state • Know the part played by evaporation and condensation in the water cycle	• Identify and name appliances that require electricity to function • Construct a series circuit • Identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers) • Predict and test whether a lamp will light within a circuit • Know the function of a switch • Know the difference between a conductor and an insulator; giving examples of each	• Know how sound is made, associating some of them with vibrating • Know how sound travels from a source to our ears • Know the correlation between pitch and the object producing a sound • Know the correlation between the volume of a sound and the strength of the vibrations that produced it • Know what happens to a sound as it travels away from its source

Year 4

Working Scientifically

❑ Ask questions such as:
    • Why are steam and ice the same thing?
    • Why is the liver important in the digestive systems?
    • What do we mean by 'pitch' when it comes to sound?
	❑ Gather and record information using a chart, matrix or tally chart, depending on what is most sensible

	❑ Group information according to common factors e.g. materials that make good conductors or insulators
❑ Use research to find out how much time it takes to digest most of our food	❑ Use bar charts and other statistical tables (in line with Year 4 mathematics statistics) to record findings
❑ Use research to find out which materials make effective conductors and insulators of electricity	❑ Present findings using written explanations and include diagrams, when needed
❑ Carry out tests to see, for example, which of two instruments make the highest or lowest sounds and to see if a glass of ice weighs the same as a glass of water	❑ Write up findings using a planning, doing and evaluating process
❑ Set up a fair test with more than one variable e.g. using different materials to cut out sound	❑ Make sense of findings and draw conclusions which helps them understand more about the scientific information that has been learned
❑ Explain to others why a test that has been set up is a fair one e.g. discover how fast ice melts in different temperatures	❑ When making predictions there are plausible reasons as to why they have done so
❑ Measure carefully (taking account of mathematical knowledge up to Year 4) and add to scientific learning	❑ Able to amend predictions according to findings
❑ Use a data logger to check on the time it takes ice to melt to water in different temperatures	❑ Prepared to change ideas as a result of what has been found out during a scientific enquiry
❑ Use a thermometer to measure temperature and know there are two main scales used to measure temperature	