

HUMANITIES			
Geography			
Knowledge & Understanding	ge.1. Human & Physical	Explain how climate zones, biomes and vegetation belts affect the physical and human features of a place in the world.	
	ge.2. United Kingdom	Describe in detail the human characteristics of some of the largest cities of the United Kingdom, taking into account population, economic activity and transport systems.	
	ge.3. The World	Describe the environmental regions, key human and physical characteristics, countries and major cities of Europe, North and South America.	
	ge.4. Environmental	Evaluate the effectiveness and impact of environmental schemes in place to sustain or improve the environment.	
	ge.5. Processes	Describe how climate, ecology and people are affected by cold, and the freezing and thawing processes.	
	ge.6. Patterns	Identify geographical patterns on a range of scales.	
	ge.7. Weather & Climate	Explain how extreme climates affect the lives of people living there and the human and physical geography.	
	ge.8. Places	Describe how physical and human processes can lead to similarities/differences in the environments of places and in the lives of people who live there.	
	ge.9. Changes over time	Explain how physical and human processes lead to diversity and change in places.	
	ge.10. Express views	Recognise that different values and attitudes, including their own, result in different approaches to environmental interaction and change.	
	ge.11. Mapping	Produce accurate scaled maps.	
Practical	ge.12. Using maps	Compare and contrast areas of the UK and the wider world by analysing the geographical features on a range of maps, including digital/computer mapping.	
	ge.13. Field work	Describe and explain geographical processes observed including taking accurate measurements and representing these in text, graphs and spreadsheets.	
	ge.14. Vocabulary	Present findings both graphically and in writing using appropriate vocabulary.	
	ge.15. Research	Use search engines, index, contents and other research techniques to locate and interpret information. Identify gaps in information collated and suggest ways of finding it.	
	ge.16. Direction	Plot a route on a map, globe or satellite image, suggesting the fastest route from one place to another and the most effective mode of transport.	
	ge.17. Positioning	Explain how time zones (including day and night) of different countries around the world affect the human and physical geography of a place.	
	ge.18. Data	Analyse and present more complex data, from different sources, suggesting reasons why it may vary.	
	ge.19. Perspectives	Use the web and satellite mapping tools to find out and present geographical information about a place.	
	History		
	Hi.1. Similarities & Difference	Make connections, draw contrasts and identify trends in two or more periods of history, to improve historical perspective.	
Hi.2. Vocabulary	Use in context and understand terms relating to different types of history (e.g. cultural, economic, military, political, religious and social).		
Hi.3. Chronology	Create, from memory, a timeline from dates/details/eras showing knowledge of how to check for accuracy.		
Hi.4. Significant individuals	Describe how their own lives have been influenced by a significant individual or movement.		
Hi.5. Local historical	Suggest and research information sources required to present an in-depth study of a local town or city.		
Hi.6. Continuity & change	Provide reasons for, and outcomes of, the main events and changes in historical periods, showing factual knowledge of aspects of Britain and the wider world.		
Hi.7. Cause & consequence	Describe the negative or positive impact of a period of history on contemporary society.		
Hi.8. Historical Questions	Independently investigate a complex historical research question.		
Hi.9. Recording	Select, organise, summarise and present relevant information, from a wide range of sources, in the most effective way for a given purpose.		
Hi.10. Historical Enquiry	Acknowledge different points of view expressed and explain why these are important in understanding and interpreting history.		

SCIENCE & TECHNOLOGY		
Science		
Working Scientifically	Sc.1. Asking & Answering Questions	Pose/select the most appropriate line of enquiry to investigate scientific questions.
	Sc.2. Investigations	Select and plan the most suitable line of enquiry, explaining which variables need to be controlled and why, in a variety of comparative and fair tests.
	Sc.3. Observing	Make their own decisions about which observations to make, using test results and observations to make predictions or set up further comparative or fair tests.
	Sc.4. Equipment & Measuring	Choose the most appropriate equipment in order to take measurements, explaining how to use it accurately. Decide how long to take measurements for, checking results with additional readings.
	Sc.5. Identifying & classifying	Identify and explain patterns seen in the natural environment.
	Sc.6. Recording & Reporting on findings	Choose the most effective approach to record and report results, linking to mathematical knowledge.
	Sc.7. Analysing data	Identify and explain causal relationships in data and identify evidence that supports or refutes their findings, selecting fact from opinion.
	Sc.8. Drawing conclusions	Identify validity of conclusion and required improvement to methodology. Discuss how scientific ideas develop over time.
	Sc.9. Identifying & naming	Identify the major parts of the human circulatory system and their functions.
	Sc.10. Classification	Recognise the importance of the classification system and its inception, giving reasons for how the groups and subgroups are chosen.
Animals inc humans	Sc.11. Habitats, adaptation & Interdependence	Describe how animals must be adapted to their habitats for survival, using a range of animals and their adaptations as examples.
	Sc.12. Growth, Health & Survival	Recognise and describe the damaging impact that some drugs and other substances can have on the human body.
	Sc.13. Diet & Teeth	Explain how nutrients and water are transported within humans and animals.
	Sc.14. The Body	Describe how lifestyle is important for the health of the human circulatory system, contributing towards a class policy on exercise and diet choices.
	Sc.15. Life Cycles	Describe how the life cycles of bacteria and viruses differ.
	Sc.16. Comparing	Compare scientifically the effect that different exercises have on heart rate, making predictions and measuring heart rate accurately.
	Sc.17. Identifying & Naming	Identify features which are inherited from parents, such as eye colour and those that are not, such as tattoos and dyed hair colour.
	Sc.18. Inheritance	Match offspring to their parents, linked to observable features and characteristics.
	Sc.19. Evolution	Describe how variation in living things leads to the evolution of a species, using specific examples. Research the work of Darwin or Wallace to explain how the theory of evolution developed.
	Sc.20. Adaptation	Identify how specific plants or animals have adapted to their environment.
Evolution & Inheritance	Sc.21. Fossils	Explain how fossils are formed and how fossil discoveries have helped develop the theory of evolution.
	Sc.22. The Future	Suggest ways in which future changes in the world's climate may impact on ourselves and other living species, and suggest ideas for how we may adapt to these changes.
	Sc.26. Day & Night	Compare times in other parts of the world and relate this to the use of time zones.
	Sc.27. Day length & the seasons	Explain how the day length changes to a greater or lesser degree in other parts of the world (e.g. Arctic or equatorial regions).
	Sc.28. Identifying & Naming	Identify plants which have survived on Earth for millions of years and how we know this.
	Sc.29. Classification	Devise classification keys to identify plants in the immediate environment. Give reasons for classification and understand the significance of scientists' work, from study.
	Sc.30. Plants parts and their functions	Research and describe similarities and differences between petals, leaves, stamen and stigma on a variety of plants found in the locality and elsewhere.
	Sc.31. Habitats and Adaption	Describe how plants have adapted and ultimately evolved to suit their environments using specific examples.
	Sc.32. Growth & Survival	Suggest why some plants have survived over time and some have not.
	Sc.33. Life cycles	Define the plant terms 'annual', 'biennial' and 'perennial', describing differences in life cycles and identifying plants of each type.
Plants	Sc.34. Seasonal Changes	Identify relationships between the seasons and a typical plant life cycle using observations from the school environment.
	Sc.35. Comparisons	Compare native plants with non-native plants and determine whether non-native plants can be classified in the same way as native plants.
	Sc.50. Identifying & Naming	Identify and name components of a circuit and define terms, such as voltage and current in relation to series circuits.
	Sc.51. Series circuits	Work scientifically to construct a series circuit for a specific device or outcome and explain how it works.
	Sc.52. Circuit symbols	Draw a series circuit, using the conventional circuit symbols.
	Sc.53. Current & Voltage	Describe the relationship between the number or voltage of a cell or cells and the effect it has on a bulb or buzzer for example.
	Sc.54. Conductors & Insulators	Predict materials that could be good conductors of electricity and conduct a fair test to show this.
	Sc.55. Safety	Demonstrate how to work safely with electrical circuits.
	Co.1. Algorithms	Produce algorithms independently using logical and appropriate structures to organise and record data.
	Co.2. Computational Thinking	Create flowcharts and other diagrams to explain how a process or model works.
Computing	Co.3. Problem solving	Independently problem solve and model situations and processes, by understanding and explaining the impact of changing variables and rules within a model.
	Co.4. Networks: know and understanding	Demonstrate knowledge and understanding of how networks work by describing the types of service offered (e.g. through email, www, ftp and video conferencing).

Co.5. Networks: using & applying	Design and create/use a range of programs to accomplish given goals.
Co.6. Digital Literacy: Knowledge & Understanding	Take account of accuracy and potential bias when searching for and selecting information.
Co.7. Digital Literacy: Using & Applying	Evaluate and improve presentations in the light of discussion, marking and audience response.
Co.8. E-Safety: Personal knowledge & Understanding	Find, report and flag buttons in commonly used sites and name sources of help (e.g. Childline and Cybernators). Find a Click-CEOP button and explain to parents what it is for.
Co.9. E-safety: Responsibilities	Discuss scenarios involving online risk. State the source of information found online. Act as a role model for younger children.
Co.10. Data: Knowledge & Understanding	Explain that changing the numerical data affects a calculation.
Co.11. Data: Using & Applying	Create data collection forms and enter data from these accurately. Make graphs from the calculations on their spreadsheet. Sort and filter information.
Design & Technology	
DT.1. Tools	Use more complex tools with increasing accuracy.
DT.2. Materials	Choose the best materials for a task, showing an understanding of their working characteristics.
DT.3. Health & Safety	Demonstrate how their products take into account the safety of the user.
DT.4. Repair & Maintenance	Paint, glue, nail and sand to rejuvenate a damaged, faulty or old object.
DT.5. Textiles	Combine fabrics to create more useful properties and make a product of high quality, checking for snags and glitches.
DT.6. Card making	Combine materials with moving joints.
DT.7. Cutting	Use a craft knife, cutting mat and safety ruler with one to one supervision if needed.
DT.8. Joining	Join materials, using the most appropriate method for the materials or purpose.
DT.9. Structures	Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.
DT.10. Mechanisms	Select the most appropriate mechanical system for a particular purpose.
DT.11. Electricity	Design products incorporating the most appropriate electrical systems.
DT.12. ICT	Develop, try out and refine sequences of instructions to effectively monitor, measure and control events.
DT.13. Designing	Develop detailed criteria for designs for products aimed at particular individuals or groups, sharing ideas through cross-sectional and exploded diagrams, prototypes and pattern pieces.
DT.14. Using ICT to aid design	Use CAD/CAM packages to design moving parts of a design.
DT.15. Working from plans	Check work as it develops and modify their approach in the light of progress.
DT.16. Opinion & Influence	Research cultural traditions and evidence their influence in their own work.
DT.17. Existing product evaluation	Explain the form and function of familiar existing products.
DT.18. Evaluation	Demonstrate modifications made to a product, as a result of ongoing evaluation, by themselves and others.
DT.19. History & Culture	Describe how an individual in the field of design and technology has helped shape the world.
HEALTHY LIVING	
PSHCE	
PS.1. Confidence & Responsibility	Reflect on and evaluate their achievements and strengths in all areas of their lives, recognising their own worth. Take responsibility for a range of tasks, in a range of scenarios, with growing independence.
PS.2. Views & Opinions	Present, in a variety of ways, opinions on a wider range of topics, affecting both themselves and society, justifying their views and conclusions through evidence and separating fact from opinion. Understand the changes involved in puberty and about human reproduction. State the basic facts and laws about alcohol, tobacco and legal/illegal drugs, including an understanding of the term 'habit' and how habits can affect health and lifestyle.
PS.3. Health & Hygiene	Describe some of the different beliefs and values in society, demonstrating respect and tolerance towards people different from themselves. Explore how information is presented differently in the media and online.
PS.4. Relationship and respect	Identify & explain how to manage the risks in different familiar situations (e.g. discussing issues connected to personal safety such as legal drugs), understanding there are different levels of risk, including when a 'secret' should be shared.
PS.5. Personal safety	Predict, assess and discuss how to manage situations that may have higher levels of risk associated with them. Respond appropriately to a wide range of feelings and emotions in themselves and others.
PS.6. Emotional wellbeing	Give quality, constructive feedback and support to benefit themselves and others when working collaboratively.
PS.7. Collaboration	

PS.8. Diversity	Consider reasons why someone may want to bully another person and suggest ways to support them.
PS.9. Citizenship	Describe how different types of rights need to be protected, supported and balanced.
PS.10. Financial Understanding	Explore a controversial or emotive issue, considering both sides of an argument before forming a personal view or opinion. Explain how they can make a positive contribution to society, now and in the future.
PS.11. Relationships and Feeling	Talk about a range of jobs, and explain how they will develop skills to work in the future. Begin to develop an understanding of the terms 'savings', 'interest', 'tax' and 'debt'.
PS.12. Goals	Explain how a variety of social and personal relationships might change over time, including transition, loss, divorce, separation and bereavement.
	Identify positive things about themselves and their achievements; seeing their mistakes, making amends & setting personal goals. Develop self-organising and time management skills.
PE	
PE.1. Strategy	Apply tactical knowledge effectively in attacking and defending situations.
PE.2. Team Games	Use and adapt tactics, choosing the most effective one for different situations.
PE.3. Sending & Striking	Select and perform combinations of sending and striking skills with confidence, accuracy and consistency.
PE.4. Dance	Move in time to music, creating movements that express the meaning and mood of the piece.
PE.5. Athletics	Demonstrate a high level of control, speed, strength and stamina when running, jumping and throwing and suggest ways to improve their performance.
PE.6. Gymnastics	Combine and perform gymnastic actions, using the whole body, adapting movements and balances to a routine so that they fit into a sequence.
PE.7. Outdoor Adventurous Activity	Lead groups in problem solving, analysing their own effectiveness as a team leader.
PE.8. Swimming	Swim over 100 metres, using 3 strokes, at a sustainable pace, being able to perform a wide range of survival techniques.
Cooking & Nutrition	
CN.1. Preparing & cooking Food	Use appropriate tools and equipment, weighing and measuring with scales.
CN.2. Nutrition	Plan how they can have a healthy/affordable diet.
CN.3. Origins of food	Explain how ingredients were grown, reared, caught and processed.
THE ARTS	
Art & Design	
Ar.1. Sketch book	Make own papers to use in a sketch book or journal.
Ar.3. Selection	Describe how the techniques and themes used by other artists and genres have been developed in their own work.
Ar.4. Drawing	Use a variety of media to represent light, shade, form, pattern and texture in a range of drawing work.
Ar.6. Colour	Mix and use colour to reflect mood and atmosphere.
Ar.7. Print Making	Using digital software, create abstract prints which involve experimentation with colour, size, shape and repetition.
Ar.8. College	Embellish a 3-D form using collage techniques (decoupage).
Ar.9. Photography	Combine images using digital technology, colour, size and rotation.
Music	
Mu.1. Listening	Identify and explore the relationship between sounds and how different meanings can be expressed through sound and music.
Mu.2. Composing	Compose a piece of music based on a theme (e.g. a film or a special event).
Mu.3. Vocabulary	Describe how music can be used to create expressive effects and convey emotion.
Mu.4. Performing	Take the lead in performances and provide suggestions to others.
Mu.5. Singing	Identify how sounds can be combined and used expressively, layering sounds and singing in tune with other performers.
Mu.6. Pulse & Rhythm	Create complex rhythmic patterns, using a variety of instrumentation with an awareness of timbre (quality of sound) and duration (length of notes and intervals).
Mu.7. Notation	Recognise/use staff and use unconventional notation when composing.
Mu.8. Appreciation & Understanding	Listen to and comment on the work of musicians and composers, indicating own preferences. Explain the influence of historical events on music.
Drama	
Dr.1. Performance / Drama	Choose specific dialogue, gestures and movement in different roles and scenarios to engage an audience and make the meaning clear.