Subject Objectives covered by The Great Growing Project and Six Trees and Six Flowers Project

Subjects	KS1	KS2	KS3
English	Books - The Gruffalo, The Lorax, The Stick Man, Because of an Acorn, Charlie and Lola: Look after Your Planet, The Great Kapok Tree Poetry - The Great Kapok Tree, My Favorite Tree, Non-Fiction - Instructions on planting a tree, Explanation on a plant life cycle.	Books - Grandpa's Christmas, A Drop Around the World, Pass the Energy Please!, The Dandelion Seed, The Animals of Farthing Wood, Cosmic, Dear GreenPeace Poetry - The Tree in the Ancient Forest, On One Flower: Butterflies, Ticks and other Icks Non-Fiction - Newspaper report on deforestation, Non-chron on a type of native tree or flower	Books - Children of the New Forest, Watership Down, Breathe, The Last Wild series, Exodus, Oryx and Crake Poetry - Environmental, Descriptive, Christina Rossetti Non-Fiction - Tourist Booklet for the area,
Maths	Data Handling Measure	Data Handling Measure	Data Handling Measure
Science	 identify and name a variety of common wild and garden plants, including deciduous and evergreen trees identify and describe the basic structure of a variety of common flowering plants, including trees observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies observe and describe how seeds and bulbs grow into mature plants 	identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant investigate the way in which water is transported within plants explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal recognise that environments can change and that this can sometimes pose dangers to living things describe the life process of reproduction in some plants and animals give reasons for classifying plants and animals based on specific characteristics identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	 the role of leaf stomata in gas exchange in plants reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms the dependence of almost all life on Earth on the ability of photosynthetic organisms, such as plants and algae the adaptations of leaves for photosynthesis the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops the importance of plant reproduction through insect pollination in human food security how organisms affect, and are affected by, their environment, including the accumulation of toxic materials
Computing	use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school	use sequence, selection, and repetition in programs; work with variables and various forms of input and output	design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users
Art/DT	 to use a range of materials creatively to design and make products to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work 	*to create sketch books to record their observations and use them to review and revisit ideas *to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] *about great artists, architects and designers in history	 to use a range of techniques to record their observations in sketchbooks, journals and other media as a basis for exploring their ideas to use a range of techniques and media, including painting to increase their proficiency in the handling of different materials to analyse and evaluate their own work, and that of others, in order to strengthen the visual impact or applications of their work about the history of art, craft, design and architecture, including periods, styles and major movements from ancient times up to the present day
Geography	 understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles use simple compass directions (north, south, east and west) and locational and directional language [for example, near and far, left and right], to describe the location of features and routes on a map use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment 	identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time understand geographical similarities and differences describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods	understand how human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on the effective functioning of natural systems interpret Ordnance Survey maps in the classroom and the field, including using grid references and scale, topographical and other thematic mapping, and aerial and satellite photographs use Geographical Information Systems (GIS) to view, analyse and interpret places and data use fieldwork in contrasting locations to collect, analyse and draw conclusions from geographical data, using multiple sources of increasingly complex information
History	understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed significant historical events, people and places in their own locality	understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed changes in Britain from the Stone Age to the Iron Age local history study	understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed local history study