Topic Name	Plants
Big Question	How did that blossom become an apple?
Scientists to use as examples	Jospeh Banks, Ahmed Mumin Warfa, George Washington
Key Knowledge	• 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
Key investigational skills	Will different liquids affect plant growth? Fair test – same amount of liquid, same plant – discuss with children Classify plants/tress in school grounds and local area How big are the trees –m, cm measure the trunk, estimate/calculate how old Tables to monitor growth Photos over time Draw different trees around the school grounds or in a local park (diagrams) Charts to show how much plants grew over time. Photos of plants, trees Present to class Photos of plants as liquid fair test occurs – time lapse photos Which liquid did affect plant growth? Why – reasoning and different ideas – sugar, What could we test next – plants Ways different plants grow, What do plants need to grow? Find out what the liquids contain to affect plant growth, use of secondary sources to back up findings Pupils might work scientifically by: comparing the effect of different factors on plant growth, for example, the amount of light, the amount of fertiliser; discovering how seeds are formed by observing the different stages of plant life cycles over a period

	of time; looking for patterns in the structure of fruits that relate to how the seeds are dispersed. They might observe how water is transported in plants, for example, by putting cut, white carnations into coloured water and observing how water travels up the stem to the flowers.
Vocabulary	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport
Prior learning – what children should know	Many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom. The roots absorb water and nutrients from the soil and anchor the plant in place. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. The leaves use sunlight and water to produce the plant's food. Some plants produce flowers which enable the plant to reproduce. Pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination). This forms seeds, sometimes contained in berries or fruits which are then dispersed in different ways. Different plants require different conditions for germination and growth. •
Future learning – next time they will be learning	Can explain the function of the parts of a flowering plant • Can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal, and germination • Can give different methods of pollination and seed dispersal, including examples
Visits	Gardening club Garden centre Gardener visit
Book links	The boy who grew dragons