



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
National Curriculum Objectives	Uses of every day materials -identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses -find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Plants -observe and describe how seeds and bulbs grow into mature plants.	Living things and their habitat -explore and compare the differences between things that are living, dead, and things that have never been alive - identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other - identify and name a variety of plants and animals in their habitats, including micro-habitats -describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	Plants - observe and describe how seeds and bulbs grow into mature plants - find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Animals including humans - notice that animals, including humans, have offspring which grow into adults - find out about and describe the basic needs of animals, including humans, for survival (water, food and air) - describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Plants -observe and describe how seeds and bulbs grow into mature plants
TAPs Assessment	Gather and record data to help in answering questions – materials hunt Ask simple Qs and recognise that they can be answered in different ways – waterproof Perform simple tests- rocket mouse		Identify and classify. Use of appropriate scientific language to communicate their ideas – living and non-living Gather and record data to help in answering questions – woodlice habitats Identify and Classify. Use appropriate scientific language to communicate ideas – nature spotters	Observe closely, using simple equipment - compare growth	Use their observations and ideas to suggest answers to questions – hand-spans	
Science Capital Opportunities	Compare materials used in school to those you may find on different types of vehicles. Look at how use of materials for familiar objects (e.g. vehicles) have developed over time using first hand observations at the airport, Doncaster air museum, the Yorkshire Air Museum in York or the NRM (spruce and ash was used to build the Kitty Hawk, most planes are built of aluminium today). Examine how the materials used to build a plane/train may have different uses, including familiar materials. Children perform comparative tests to find the suitable materials to make a parachute/aircraft. Children will learn about a person who has developed useful new materials which have helped improve travel such as John Dunlop who invented the pneumatic tyre or John McAdam who developed tarmac. Children work scientifically to make an air-powered launcher to propel a card rocket. plane or train (rocket mice).	Pupils will use the local environment throughout the year to observe how different plants grow, keeping a record over the year.	Pupils will have the opportunity to visit the local environment e.g. Sandall Beat, Austerfield and the school grounds and observe the plants and animals that grow there, for example by looking at the micro-habitat of leaf litter or under logs and stones and discover the food chains that occur in the local area. Children should then compare animals in less familiar habitats – potential link to geography topic.	Children will grow sugar snap peas which will be planted in March and should be ready to produce edible peas in July, observing and recording systematically. Children will set up comparative tests to show that plants need light and water to stay healthy.	Children have the opportunity to observe animals e.g. butterflies growing and potentially link to Roots of Empathy/visits from baby siblings or relations.	Pupils will use the local environment throughout the year to observe how different plants grow, keeping a record over the year.