Overview Science Year 2

	Autumn Term	Spring Term	Summer Term
Big Question	Fire; Friend or Foe?	How can we look after our world?	What does it take to be a hero?
Other Subject links	Tudors, Great Fire of London	Kenya, VISIT to APPLE store,	Florence Nightingale

	Autumn 1 Uses of Everyday Materials	Autumn 2 Scientific Enquiry - Materials	Spring 1 Animals incl humans	Spring 2 Living things and their habitats	Summer 1 Plants	Summer 2 Scientific Enquiry - Experiments
National Curriculum	- 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	- Asking simple questions and recognising that they can be answered in different ways - Observing closely, using simple equipment - Performing simple tests - Identifying and classifying - Using their observations and ideas to suggest answers to questions - Gathering and recording data to help in answering questions	- 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	- 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 microhabitats - Describe how animals obtain their food from plants and other animals, using the idea of a simple	- 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	Working Scientifically - Asking simple questions and recognising that they can be answered in different ways - Observing closely, using simple equipment - Performing simple tests - Identifying and classifying - Using their observations and ideas to suggest answers to questions - Gathering and recording data to help in answering questions

				food chain, and identify and name different sources of food		
Knowledge	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 shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. May have som	Asking simple questions and recognising that they can be answered in different ways - Observing closely, using simple equipment - Performing simple tests - Identifying and classifying - Using their observations and ideas to suggest answers to questions - Gathering and recording data to help in answering questions	- 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	- 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 microhabitats - 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	- 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	Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions
Skills - Working Scientifically	Compare the use of everyday materials in and around school with other places such as home, journey to school, visits etc. Identify and classify the uses of different materials and record their observations. Find out	Compare the use of everyday materials in and around school with other places such as home, journey to school, visits etc. Identify and classify the uses of different materials and record their	Observing through video or first-hand observation and measurement, how different animals including humans grow. Ask questions about what things animals need for survival and what humans need to stay healthy. Suggest ways to find answers to their questions.	Sorting and classifying things to whether they are living, dead or were never alive and record their findings. Describe how they decided to place things and ask questions such as 'Is a flame alive?'. Construct simple food chains which	Observing and recording, with accuracy, the growth of a variety of plants. Discussing how they change over time from a seed or bulb. Closely observe the same plants at	asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying

	about people who developed new and useful materials. Identify and discuss why some materials are good for some things and not for others.	observations. Find out about people who developed new and useful materials. Identify and discuss why some materials are good for some things and not for others.		includes humans. Describe the conditions in different habitats and micro-habitats (under logs, on stony path, under bushes) and find out how the conditions affect the number and type(s) of plants and animals that live there.	different stages of growth. Setting up comparative tests to show that plants need light and water to stay healthy.	using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions
Vocabulary	waterproof, fabric, rubber, cars, macadamisation, rock, paper, cardboard, wood, metal, plastic, glass, brick, twisting, bending, squashing, matches, cans, spoons.		Living, dead, never alive, habitats, micro-habitats, food, food chain, leaf, litter, shelter, sea shore, woodland, ocean, rainforest, conditions, desert, damp, shade.	Living, dead, never alive, habitats, micro-habitats, food, food chain, leaf, litter, shelter, sea shore, woodland, ocean, rainforest, conditions, desert, damp, shade.	observation, groweth, compare, record, seeds, bulbs, temperature, roots, stem, predict, leaf, flower, measure, diagram, comparative tests, life cycle, life process, germinate, grain.	
Experiment/s	Classifying materials, heating and cooling materials, changing shapes of materials.	Absorbency, water resistance, strength of materials, classifying materials, changing materials through heat.	N/A	Micro habitats, classifying animals.	Plants grown in different places, classifying seeds/bulbs, investigating how bulbs/seeds grow differently.	All of it.
Extended writing	Charles McIntosh information. Week 5	Write an explanation and scientific write up. Week 4.	Describing life cycles week 3 and 4, meal plan week 5	Describing habitats and how animals are suited. Week 2, week 3.	Diary as a seed. Week 2 and Week 3.	Letter writing - to give advice on survival. Week 1
How does it link to the big question?	Exploring how fire affects/creates materials. Properties of materials used for building past/now and the suitability.		Exploring how animals/people in the world survive. Where they find their food/water etc. World is wonderful for different animals etc.		Links to superhero powers and equipment.	