Long term plan - Science –(SMSC links in red) - Updated 11/3/2021

Year Group	Autumn Term	Spring Term	Summer Term
Reception EYFS	All about me – How am I special? Where I live Growth – from a baby to now. Physical development – what can I do now that I couldn't do as a baby? Exploring textures of materials Autumn then Winter, Seasons and their changes, weather. Hibernation Comparing and contrasting environments. Exercise and its affects on our bodies, healthy eating. Identifying parts of our bodies. **healthy eating, taking regular exercise**	Exploring materials, ice investigations – links to seasonal changes. What happens in Winter? Magnetic materials – what is magnetic and non-magnetic. Recycling – litter and it's affect on the world around us. Spring and comparisons with Autumn and Winter. Animal habitats and noctornal animals. Keeping fit and healthy – **healthy eating, taking regular exercise**	Sea creatures, habitats and creatures with shells. Recycling and pollution – effects on our oceans. Floating and sinking exploring materials to make a pirate ship. Plants and what they need to grow. Minibeasts and why they are helpful to our gardens. How can we attract minibeasts? Summer and comparisons with previous seasons. Fruit and vegetables, exploring and classifying. Keeping fit and healthy – **healthy eating, taking regular exercise**
Year 1 Key Stage 1	Pupils should observe and talk about changes in the weather and the seasons – Pupil work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change – **observe the weather patterns and changes in autumn alongside features in nature that change in the season.** Pupils identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock .	Pupils should observe and talk about changes in the weather and the seasons – Pupil work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change – **Winter and Spring** Pupils distinguish between an object and the material from which it is made – Pupils identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock –	Pupils should observe and talk about changes in the weather and the seasons – Pupil work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change – **Summer** Pupils identify and name a variety of common wild and garden plants, including deciduous and evergreen trees –**Weston Park visit, Chetwynd Deer Park visit, school environment.** Pupils identify and describe the structure of a variety of common

	They distinguish between what an object is and what it is made from. Explore vocabulary to describe materials. Distinguish between natural and man-made materials. **Describe, sort and name materials to find the best one to make a kite with.** **Describe the properties of materials for helicopters at Cosford Air Museum visit.**	Pupils describe the simple physical properties of a variety of everyday materials – Pupils compare and group together a variety of everyday materials on the basis of their simple physical properties – **compare and group materials and identify why we use particular materials to build a castle – Stafford Castle visit**	flowering plants including trees – **Weston Park visit, Chetwynd Deer Park visit, school environment.** Pupils identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals – **visit from the Dogs Trust, change in chicks, butterflies and frogs** Pupils describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets. Children will know that animals including humans have offspring which grow into adults. Indroduction into the processes of reproduction and growth. Pupils identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense – **Fantastic me, healthy eating week, taking regular exercise, investigations about the senses**
Year 2 Key Stage 1	Pupils notice that animals, including humans, have offspring which grow into adults –**life of a penguin** Pupils find out about and describe the basic needs of animals, humans, for survival (water, food and air) – **arctic life through the story of Immi the Inuit** Animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name	**Science experience– visit to the Burton Borough School for a science show led by Science teachers from the school.** Pupils identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Pupils find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting	Pupils explore and compare the differences between things that are living, dead, and things that have never been alive –**Dinosaurs and all that rubbish.** Pupils 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 – **study of**

	different sources of food – food chains studied linked to arctic life. Children will learn what carnivores, herbivores and omnivores are and to be able to describe some animals. They will find out about habitats, naming and exploring habitats from around the world and comparing and contrasting how they differ. They will identify how animals are suited to the place that they live.	and stretching – **irreversible changes in materials studied through melting and baking activities.** **Study of Newport Canal – changes with the seasons and animals and birds nesting in the Spring.** Pupils describe the importance of humans of exercise, eating the right amounts of different types of food, and hygiene	**minibeasts around the school grounds and down by the Newport Canal** Pupils identify and name a variety of plants and animals in their habitats, including micro-habitats – **habitats in the school environment discovered through a bug hunt.** Pupils observe and describe how seeds and bulbs grow into mature plants – Pupils find out and describe how plants need water, light and a suitable temperature to grow and stay healthy – **Investigations using cress seeds and monitoring their growth.** Pupils describe the importance of humans of exercise, eating the right amounts of different types of food, and hygiene