SCIENCE AT SANDBROOK 2019-20

We use the Engaging Science scheme of work to support our teaching of the science National Curriculum.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y1/2_ Weather (each term) Pupils will observe changes across the four seasons. They will observe and describe weather associated with the seasons and how day length varies Our Environment & Seasonal Change Review	The Animal Kingdom 1.2 Pupils will become familiar with common British vertebrates and invertebrates. They will learn about the different groups of vertebrates and be able to describe the main external features of each group. They will look at what animals eat and will understand that different animals have	Local habitats 2.1 Pupils visit the same habitats and microhabitats at different times of year and explore the seasonal changes in a habitat and a microhabitat. They continue to develop their observation skills. 2.3 Animals and their Needs In this unit pupils begin by learning about the stages of human growth. They learn that	Spring 1 Everyday Materials 1.3 Pupils develop vocabulary to descrearry out a range of simple tests or best material to make a particular Materials 2.5 See 1.3	ribe material properties. They naterials and investigate the	1.4 Plants Pupils learn the names of some coand trees. They plant bulbs and/cover a period of weeks. They go on wild and cultivated areas, making Plants 2.4 Pupils learn the names of some and trees. They plant bulbs and/	ommon native flowering plants or seeds and observe their growth outside to study flowers and trees ing sketches and notes. common native flowering plants for seeds and observe their They go outside to study flowers
Our Environment & Seasonal Change Review Pupils study the same natural area during the course of the year, looking at how the area as a whole changes and at how individual aspects such as a single tree change during the different seasons. They use their senses to observe the area and find common animals and plants within the area. They	features of each group. They will look at what animals eat and will understand that different animals have different diets. They will describe the external human body in detail.	In this unit pupils begin by learning about the stages of human growth. They learn that animals grow until they are adult and that that different animals start life in different forms, some as eggs and some as live births and they look at the needs of the young of different species. Throughout the unit they observe some animals as they grow, both in the classroom, and through webcams on the Internet. This			and trees. They plant bulbs and/ growth over a period of weeks. and trees in wild and cultivated	or seeds and observe their They go outside to study flowers
learn how to show respect for the area and for the living things in it.		unit should be taught in late spring when it is possible to observe young birds and animals growing though online webcams.				

	Unit 3.2 Animals and	4.6 States of Matter	3.4 Plants	Unit 3.6 Rocks	Unit 3.5 Light	3.3 Forces and Magnets
	skeletons	Pupils learn that	Pupils will carry out a	Pupils explore the	Pupils learn to	Pupils explore
	Pupils revisit the	materials come in three	long-term investigation	characteristics of rocks	distinguish a light source	magnetism and non-
	classification of animals	states of matter: solid,	of the factors that affect	and learn their names.	from reflected light.	contact forces,
	according to diet as	liquid or gas. They	the growth of plants,	They carry out simple	They learn that light	suspending magnetic
	carnivores, herbivores	identify materials as	observing and	tests on different rocks	travels in straight lines,	items in mid-air under
	or omnivores,	solids, liquids or gases,	measuring their plants	and use chocolate to	study how we see and	the influence of
	researching the diets of	including some that are	for the course of the	model how rocks are	are taught how to	magnetic forces. They
	animals in more detail.	harder to classify such	unit. They will learn	made. They explore the	protect their eyes. They	test materials for
	They look at human	as sand or sponge. They	about the main	composition of soil and	investigate the	magnetic properties and
	dietary requirements	learn how to use a	functions of the	think about how soil is	transparency of fabrics	think about what
	and begin to identify	thermometer and	different parts of a plant	made. They learn about	using data loggers and	materials are magnetic.
Y3/4	different food types and	investigate changes of	and will study the life	the formation of fossils	carry out some	They describe the
13/4	their different uses in	state. They learn about	cycle of a flowering	and make their own	experiments to find out	properties of a magnet
	the body. Pupils learn	the water cycle.	plant, including studying	model fossils. They look	about shadow	in simple terms and
	about external and		the structure of a flower	at pictures of dinosaur	formation.	learn about the uses of
	internal skeletons and		and the different	fossils and try to come		magnets.
	study the names and		methods of seed	to some conclusions	Habitats:	
	functions of the major		dispersal.	about the living	Pupils will explore the	Habitats:
	bones and muscles in			dinosaurs the fossils	flora and fauna of the	Pupils will explore the
	the human body.		Habitats:	came from.	biomes in their	flora and fauna of the
			Pupils will explore the		geographical regions.	biomes in their
			flora and fauna of the			geographical regions.
			biomes in their			
			geographical regions.			

	5.4 Mixtures and Reactions After reviewing and extending their knowledge of materials from previous years, pupils study dissolving and learn how to recover materials from	6.2 Heart and Lungs Pupils study the circulatory system, learning about the basic components that make up blood, how the heart works and how blood circulates round the	6.3 Classification Overview of the unit: Pupils build on their knowledge of classification from previous years and look at the classification of
Y6	a solution. They look at other methods of separating mixtures. They investigate chemical reactions including burning and use a key and a series of simple tests to identify some mystery powders. They learn about reversible and irreversible changes.	body. They learn about the lungs and the process of breathing and investigate the effect of exercise on the heart and breathing rates. They learn about the effects of smoking and alcohol.	invertebrates and microorganisms in more detail and playing games to help them learn about microorganisms and classes of invertebrates. They study yeast, observing its growth, using it to make bread.
	Habitats Pupils will apply their knowledge of classification, identification and feeding to explore the Polar habitats.		