YEAR 3

	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
EVERYDAY MATERIALS **BIOLOGY**	**The three Prime ELGs of Communication & Language, PSED and Physical Development provide the foundations of which all other learning is built upon.** **Specific:** The Natural World ELG Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Creating with Materials ELG Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties.	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.	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock Recognise that soils are made from rocks and organic matter.	Compare and group materials together, according to whether they are solids, liquids or gases Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	

						Demonstrate that dissolving, mixing and changes of state are reversible changes Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda	

EVERYDAY MATERIALS
COMPOSITES

Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
Describe in simple terms how fossils are formed when things that have lived are trapped within rock.
Recognise that soils are made from rocks and organic matter.

COMPONENTS

	1	2	3	4	5	6	End Point
	What are the different types of rocks?	**What are the properties of rocks?**	**What is fossilisation?**	**Who was Mary Anning?**	**How is soil formed?**	**Can I investigate soil permeability?**	**Children will know the 3 different rocks, their properties, how fossils are formed in rocks and that rocks are a part of what makes up soil.**
CONCEPTS **Link to concept map**	ROCKS AND SOIL	ROCKS AND SOIL	ROCKS AND SOIL	ROCKS AND SOIL	ROCKS AND SOIL	ROCKS AND SOIL	Understand that there are three different types of rocks and that rocks have properties. Understand how fossils are formed within rocks and what a palaeontologist is.

							Understand soil is made from rocks and organic matter.
SKILLS	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Identifying differences, similarities or changes related to simple scientific ideas and processes. Making systematic and careful observations.	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.	Describe in simple terms how fossils are formed when things that have lived are trapped within rock.	Describe in simple terms how fossils are formed when things that have lived are trapped within rock.	Recognise that soils are made from rocks and organic matter. Using straightforward scientific evidence to answer questions or to support their findings.	Recognise that soils are made from rocks and organic matter. Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.	Identify and compare rocks based on their properties.
KNOWLEDGE	Children know there are 3 types of rock and the difference between natural and manmade.	Children know how to create a fair test. Children know and name different rock properties.	Children know what a fossil is and how it is formed.	Children know what a palaeontologist is.	Children begin to understand the four processes of soil formation.	Children know how to observe and present findings scientifically. Children know what permeability means.	Children know there are 3 types of rocks and are able to name their properties. Children understand what a palaeontologist is, how a fossil is formed and the four processes of soil.
LESSON LINK	MTP Term 3	MTP Term 3	MTP Term 3	MTP Term 3	MTP Term 3	MTP Term 3	

PROGRESSIVE VOCABULARY	rocks metamorphic sedimentary igneous human-made natural form/formation	rocks group properties permeable impermeable durable buoyancy high density low density	fossil sedimentary fossilisation animals bones chemical fossils change body trace layers pressure coprolite trackways footprints	Mary Anning fossils ichthyosaur trace fossils coprolite Jurassic Lyme Regis poverty scientists	soil formation formed rock organic matter top soil sub soil base rock additions losses translocations transformations	soil formation igneous sedimentary metamorphic properties permeability permeable impermeable semi-permeable rapid moderate slow	Articulate and recognise subject specific vocabulary
CURRICULUM EXPERIENCES			Workshop from a fossil expert at Monkton Nature Reserve.				
END POINT	Children can name the 3 types of rocks and understand the difference between natural and man-made rocks.	Children came name different properties regarding the three different types of rocks. They are able to carry out a fair test in order to identify these properties.	Children will understand what a fossil is and how fossils are formed over a period of time.	Children will understand what a palaeontologist is and be able to re-call facts about the palaeontologist Mary Anning.	Children will begin to understand what soil is made up of and will start to explain the four processes of soil formation.	Children will be able to create a fair test, observe and present findings scientifically by testing the permeability of rocks.	