



Year 1 progression in scientific enquiry

	Observe changes over time	Group and classify	Research using secondary sources	Seeking patterns	Comparative and fair tests
Seasonal changes	How does the weather change throughout the year? How does the temperature change throughout the year? How do the trees change throughout the year?			In which season does it rain the most?	
Materials	Would a paper boat float forever?	What is it made from? Can you see through it?	Where do materials come from? Why is it important to know what material it is made from? What happens to our rubbish? Is plastic good or bad?		Which materials are the most flexible? Will it float or sink?
Animals		How can we organise the zoo animals? What are the names for the parts of our bodies?	Do al animals have the same sense as humans?		
Plants		How can we sort the leaves that we collected on our walk?	What are the most common British plants and where can we find them?		



Year 2 progression in scientific enquiry



	Observe changes over time	Group and classify	Research using	Seeking patterns	Comparative and fair
Materials		Can you classify and sort materials?	Secondary sources Who is Charles Macintosh?		tests Which materials are waterproof? How can materials be changed?
Living things	Can you observe one habitat throughout the year? What grows there? How does it change?	How would you group things to show which are living, dead, or have never been alive? What eats what?	What do living things need to survive? What is the animals habitat?	Which habitat do woodlice prefer? Which animals live in similar habitats and why do they live there?	
Animals			What food do you need in a healthy diet and why?		
Plants	Can you observe one plant throughout the year? What grows there? How does it change?	Can you classify seeds?		Do big seeds germinate more quickly? Does it matter which way round you plant a bulb or seed? Which comes first, the root or the shoot?	What do plants need to grow?



Year 3 progression in scientific enquiry



	Observe changes over time	Group and classify	Research using secondary sources	Seeking patterns	Comparative and fair tests
Forces/magnets		Which materials are magnetic?	What is a magnet? How are magnets used in everyday life?	Does the size and shape of magnet affect how strong it is?	How can we slow down a loving object? Which materials are magnetic? Can you move an object without touching it? Do all magnets have the same strength?
Rocks		Can you use the classification key to find out the names of the rocks in your classroom?	Who was Mary Anning and what did she discover?		
Plants	What happens to the flowers when they are left in a glass of coloured water?		What are the different ways seeds disperse?	What colour flowers do pollinating insects prefer?	
Light					How does the distance between the object and the light source affect the size of the shadow?
Animals				Do male humans have larger skulls than female humans?	



Year 4 progression in scientific enquiry



	Observe changes over time	Group and classify	Research using secondary sources	Seeking patterns	Comparative and fair tests
Sound	What is the noisest part of the school day?		Is sound dangerous?	Is there a link between how loud it is in a school and the time of day? Do sounds travel through solids, liquids, and gases? What is the difference between pitch and volume? What affects the pitch? How do you make a sound louder?	Which material is the best for muffling sound? How does the volume of a drum change as you move further away from it?
States of matter	How does the level of water change when left on the windowsill?				
Living things					
Digestive system and teeth	How does an eggshell change when it is left in coke?	What is the name for all of the digestive organs in the body?	How do dentists fix broken teeth?		
Electricity			How has electric changed the way we live?	Which room has the most electrical sockets in a house?	Which metal is the best for conducting electricity?





Year 5 progression in scientific enquiry

	Observe changes over time	Group and classify	Research using secondary sources	Seeking patterns	Comparative and fair tests
Forces			,	Who discovered gravity? Where are levers in everyday life? Why are pulleys helpful? Can you create gears?	Do objects with bigger surface areas move faster through the air? Why is an aeroplane shaped like it is? Which shape moves faster through the water?
Materials	How does a sugar cube change as it is put in a glass of water?		What are microplastics and why are they harming the planet?	Do all objects fall through water in the same way?	Why type of sugar dissolves the fastest? Which shape parachute takes the longest to fall? How does the temperature of tea affect how long it takes for a sugar cube to dissolve?
Living things					sugai cube 10 dissolvey
Animals		Can you identify the stages in the human life cycle?	Why do people get grey/white hair as they get older?	Is there a relationship between the size of an animal and its gestation period?	
Space		Can you observe and identity the phases of the moon?		Is there a pattern between the size of a planet and the time it takes to travel around the sun.	



Year 6 progression in scientific enquiry



	Observe changes over time	Group and classify	Research using secondary sources	Seeking patterns	Comparative and fair tests
Light				How can we make a shadow bigger?	
				Can light change direction?	
Electricity					How does the voltage of a battery affect the brightness of a lamp?
Living things	What happens to a piece of bread if you leave it over time?		What do different types of micro-organisms do? Are they always harmful?	Do larger flowers have more petals?	
Evolution and inheritance			What happened when Charles Darwin visited the Galapagos islands?	Is there a pattern between the size and shape of a birds beak and the food it will eat?	
Circulatory system		What organs make up the circulatory system and where are they found?			Which type of exercise has the greatest effect on our heart rate?