Year 1	
Unit	**Big ideas and key questions**
Seasons & weather  Day & night	What are the four seasons? What's the weather like in Autumn, Winter, Spring and Summer? Why does day become night?
Plants, including trees 	***Structure of plants*** What are the parts of a plant? ***Wild and common plants*** What are wild plants and where do you find them? What are garden plants and where do you find them? ***Trees*** What makes a tree? What types of tree are there in my school? What's the difference between trees?
Animals, including humans 	***Animals*** What is an animal? What types of animals are there? What is similar and what is different? ***Eating*** What does food tell us about an animal? ***Senses*** What makes me an animal? What senses do I have?
Everyday materials 	***Materials*** What are materials? What are things made of in school? ***Properties*** How can I describe materials? Which materials are waterproof and which are not? Which materials are transparent and which are opaque? ***Use what you know*** What's the best material for the job? Why?

Year 2	
Unit	**Big ideas and key questions**
Living things and their habitats	***Characteristics of living things*** What is alive and what is not? What do all living things have in common? ***Location of living things*** Where do plants and animals live? What plants and animals live in our local environment? ***How living things are connected*** What are food chains? How are they connected? Why do plants and animals need each other?
Plants 	***Growing from a seed*** How do seeds germinate and what happens? ***Growing from a bulb*** What happens when bulbs sprout? ***Healthy plants*** What do plants need to thrive and be healthy? What can happen if plants don't get the things they need? What do I notice about plants around the school? How are they healthy? How are they unhealthy? ***Show what you know*** How do seeds and bulbs grow? What do plants need to be healthy?
Animals, including humans 	***Animals and change*** REMEMBER: what is an animal? How do animals change as they mature? ***Air, water and food*** How do we change as we mature? What do all animals need to stay alive? ***Health and food*** Keeping healthy: why do we exercise? Why do we eat different types of food?
Use of everyday materials 	***Materials*** What are materials used for? Categorise and compare wood, metal, plastic and glass. Categorise and compare ceramics, rock, paper and card, and fabric. ***Changes*** What happens when we squash, bend, twist or stretch a material? ***Purpose*** What's the right material for the job? What's the most absorbent material? Who invented waterproofing?
These units are revisited throughout the year.	
REVISIT Plants, and Animals, including humans	***EXPLAIN-IT*** How do seeds and bulbs grow? ***SUMMARISE-IT*** What do I know about animals, including humans? ***INTERLEAVING and EXPLAIN-IT*** What do plants need to thrive and be healthy?

Year 3	
Unit	**Big ideas and key questions**
Rocks 	***Types*** How are rocks formed? What types of rocks are there? ***Change*** Can rocks change? How can we test a rock to see if it is limestone or chalk? ***Soil*** Is soil just dirt? What makes soil? ***Fossils*** How are fossils formed? Elaborate and remember rocks, soils and fossils.
Animals, including humans 	***Food*** What effect does the food we eat have? ***Skeleton*** Where is my skeleton and what does it do? ***Muscle*** Where are my muscles and what do they do?
Forces and magnets 	***Contact force and friction*** What are contact forces? How do surfaces affect the motion of an object? How does friction affect moving objects? ***Non-contact force*** What is a non-contact force? How is this different to a contact force? ***Magnetic force*** How do magnets attract and repel? Which materials are magnetic? Forces and magnetism summary.
Light 	***Seeing*** Do we need light to see things? ***Shadows*** How are shadows formed? ***Changing variables*** What happens to the size of a shadow when the object moves closer to, or away from, the light source?
Plants 	***Flowering plants*** What are the parts of a flowering plant? What do they do? ***Food and survival*** Do all plants need the same things to thrive and grow? How do leaves make food for the plant? How does water move through a plant? ***Flower function*** What do flowers do? What is pollination?

Year 4	
Unit	**Big ideas and key questions**
Living things and their habitat 	***Living things*** What are the characteristics of living things? ***Vertebrates and invertebrates*** What animals are vertebrates? What animals are invertebrates? ***Plants*** What groups are plants classified in? ***Classification keys*** What is classification? How do I use a key? ***Environmental changes*** What happens if the environment in a habitat changes?
States of matter 	***What is matter?*** What does 'state' mean? What are solids, liquids and gases? ***Melting***: how do materials change state? ***Evaporating***: how do materials change state? ***Condensing***: how do materials change state? ***Summary***: how do materials change their state of matter?
Animals, including humans 	***Teeth and eating*** What teeth do humans have? What do they do? How does our mouth and teeth help digestion? What's the process? Can teeth tell us what animals eat? ***The digestive system*** What are the parts of the digestive system? What do they do? How does digestion work? What's the process? ***Food chains*** What are food chains How do they work? How do I construct and interpret a food chain? ***SUMMARY*** How are teeth, digestion and food chains connected?
Electricity 	***Sources of electricity*** What appliances use electricity? What sort of power makes them work? ***Components*** Name it - what are the components in a simple series circuit? ***Apply what you know*** Diagnose it – what are the effects of changing circuit components and batteries?
Sound 	***Properties*** What is sound? ***Movement*** How does sound travel? ***Pitch and loudness*** What is the pitch and loudness of sound?

Year 5	
Unit	**Big ideas and key questions**
Properties and changes of materials 	***Properties, mixtures and solutions*** What properties do materials have? How do we use them? What is a mixture? What is a solution? (Solubility) ***Separation of materials*** How can we separate materials from a mixture? (Sieving and filtration) How can we separate materials from a solution? (Evaporation) ***Reversible and irreversible change*** What changes are reversible? What changes are irreversible?
Animals, including humans	***Life*** What is the human timeline? ***Growth*** How do we change into adults? ***Compare*** How do human and animal lifespans compare?
Forces 	***Non-contact and contact forces*** Remember gravity. When is friction helpful and when is it not? ***Resistance*** What is the effect of air resistance? What's the effect of water resistance? ***Inspirational scientist*** Who was Galileo Galilei? ***Levers, pulleys and gears*** How do levers help us? How do pulleys and gears help us?
Earth & Space 	***Position, relationship / movement of planets / spherical bodies.*** What are the planets in our solar system? (Planet comparison) How does the view of the Moon change in a solar month? (Moon phases, moon diaries) ***The effect of the Earth's rotation, tilt and orbit has on day, night and seasons.*** Why does the rotation of the Earth result in day and night? Why is the Earth's tilt (axis) responsible for the seasons?
Living things and their habitats ***MRS GREN***	***Life Cycles - MRS GREN – Recap of life processes*** What's the difference between a mammal and amphibian? What's the difference between an insect and a bird? What is similar and what is different between the life cycle of a mammal, amphibian, insect and bird? ***Inspirational scientists*** Who was Maria Merion and what did she do? ***Reproduction*** How do living things reproduce? Plants and animals – what's the life process of reproduction.

Year 6	
Unit	**Big ideas and key questions**
Living things and their habitats 	***Pioneering scientists*** Who was the scientist Carl Linnaeus and what did he do? ***Classification*** How do we classify vertebrates? How do we classify invertebrates we know? How do we classify invertebrates we don't know? ***Apply*** What animals can I classify? What animals and plants exist in my local environment?
Light 	***Properties of light*** How does light travel? What colour is light made of? ***Reflection*** Reflection - how does light help us to see objects? Which surfaces make the best reflectors? ***Colour*** Why do we see objects as a particular colour? ***Refraction*** What happens to the appearance of objects when placed in water?
Animals, including humans 	***Blood and blood vessels*** What is blood made of and why do we need it? Why do our bodies need nutrients and how are they transported? What is our circulatory system? ***The functions of the heart*** What is our heart like inside? How does it work? Who influenced what we know about our circulatory system? ***The effect of exercise, drugs and lifestyle*** What can we do to keep healthy? Present and explain what we know about the circulatory system, nutrients and keeping healthy. ***Digestion and circulation*** Remember circulation and digestion: how are these two systems connected? ***Removal of waste*** Where are the kidneys and what do they do? ***Keeping healthy*** How do kidneys keep us healthy?
Electricity 	***Do-it*** What is electricity? How does it work? How do we build and represent a series circuit? What are the components in a series circuit? ***Test-it*** How does the number of cells and voltage affect components in a circuit? ***Diagnose-it*** What are the effects and consequences of changing circuit components and batteries?
Evolution and inheritance 	***Change over time*** How have living things changed over time? How do we know? How has life evolved over time? ***Biological change*** What is DNA and what does it do? Are all offspring identical to their parents? ***Theories of evolution*** Darwin and Wallace – what evidence did they share to argue the case for evolution? Survival of the fittest - how have animals adapted and evolved to suit their environment?