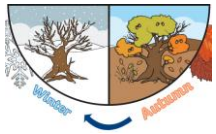
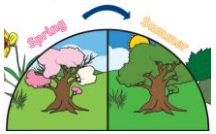
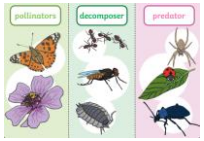
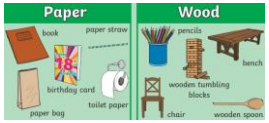
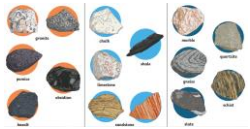
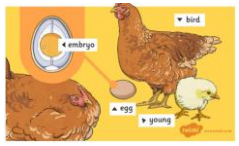
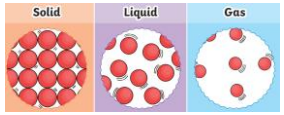
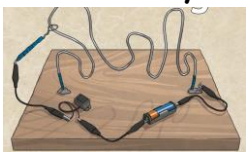
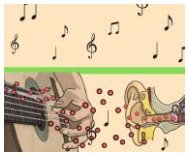
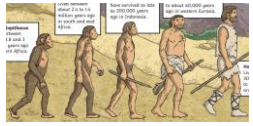
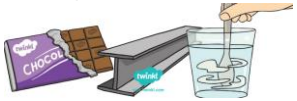
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
KS1 – Year 1 cycle	**Animals Including Humans**  • Children can name some common animals including fish, amphibians, reptiles, birds and mammals. • With support, children make careful observations of animals in the same group and can use simple features to compare living things (animals).	**Seasonal Changes (Autumn and Winter)**  • Children can identify signs of autumn and winter, including what things found in nature are related to each season. • Children can answer a scientific question by making careful observations and correctly use simple equipment to help them observe the weather.	**Plants**  •Children can begin to identify and name the basic structure of a variety of common flowering plants. •Children can make careful observations, sometimes using equipment, of plants and seeds.	**Seasonal Changes (Spring and Summer)**  •Children know that there are changes across the four seasons and can explain some of the changes that happen in spring and summer. •Children can decide how to sort and classify features of seasons into simple groups	**Nature Protectors**  •Children can distinguish between an object and the material from which it is made by naming specific objects and a range of materials, including objects that are made of more than one material. •Children can identify and name a variety of everyday materials and classify objects based on which material they are made of.	**Everyday Materials**  • Children can identify and name everyday materials. • Children can describe simple properties of everyday materials. • Children will use their observations to answer simple questions.
Skills	•Pattern seeking •Identifying, Grouping and Classifying •Comparative testing •Researching	•Observing over time •Pattern seeking •Identifying, Grouping and Classifying •Researching	•Observing over time •Identifying, Grouping and Classifying •Researching	•Observing over time •Identifying, Grouping and Classifying •Researching	•Observing over time •Pattern seeking •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Pattern seeking •Identifying, Grouping and Classifying •Comparative testing

KS1 – Year 2 cycle	**Animals Including Humans**  •Children can identify and match several animal offspring and their adult forms. They can describe the main characteristics of the offspring found in different animal groups. •Children can sort and classify objects (animals) into simple groups.	**Reduce, Reuse, Recycle**  •Children can recognise that environments can change and that this can sometimes pose dangers to living and non-living things. • Children identify, group and classify things (materials). They record classification tasks to help answer questions using a table.	**Plants**  •Children can suggest what they think a plant needs to grow and stay healthy. •Children can begin to recognise ways in which they might answer scientific questions. They can carry out simple practical tests, using simple equipment.	**Scientists and Inventors** This unit will look into famous scientists and inventors that link to this year's curriculum.	**Biodiversity – Minibeasts**  •Children can describe the basic needs of animals, including humans, for survival and what factors influence this, such as their habitats. •Children can observe the natural world around them by making careful observations, using simple equipment.	**Uses of Everyday Materials**  •Children can recognise how a material is suitable for a particular use and can provide examples. • Children can identify materials and compare them based on their properties. They can sort and classify materials, gather and record findings using a simple table and are beginning to draw simple conclusions about the suitability of materials for a range of uses, providing relevant reasons.
Skills	•Observing over time •Identifying, Grouping and Classifying •Researching	•Observing over time •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Observing over time •Identifying, Grouping and Classifying •Comparative and fair testing •Researching		•Pattern seeking •Identifying, Grouping and Classifying •Researching	•Pattern seeking •Identifying, Grouping and Classifying •Comparative and fair testing •Researching

KS2 – Year 1 cycle	**Animals Including Humans**  •Children can talk about what animals and humans need to stay healthy, showing an understanding of the food groups and the nutrients humans need for a healthy diet. •Children can present data from food labels in a table to help in answering questions.  •Children can name the different types of teeth found in humans. They can explain their function. •Children can set up and carry out simple comparative and fair tests. They can observe	**Rocks**  •Children can name the three types of naturally occurring rock and describe how they are formed. Children can also compare different types of rock based on their appearance. •Children can use straightforward scientific evidence (from observations, measurements or secondary sources) to answer questions or support their understanding.	**Forces and Magnets**  •Children can give examples of contact forces and can identify which two objects are in contact to create a push or a pull. •Children can record their findings in a table, using a model as an example, and use simple scientific language.  •Children can identify the effects of air resistance, water resistance and friction. •Children can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	**Light** •Children can understand that dark is the absence of light. • Children can set up an investigation and make predictions.  •Children can recognise that light travels in straight lines and describe how light enables us to see. •Children can understand that shadows are the same shape as the object that casts them.	**Earth and Space**  • Children can identify the celestial bodies of the Solar System and describe the Sun, Earth and Moon as approximately spherical bodies. • Children can report and explain their understanding of the planets of the Solar System, including from research.	**Living Things and Their Habitats**  •Children can recognise and classify vertebrate animals into mammals, birds, reptiles, amphibians and fish. •Children can identify changes, patterns, and similarities and differences.  • Children can identify plants that reproduce asexually and describe ways to grow new plants other than from seed. •Children can order the stages of the life cycles of mammals, birds, insects and amphibians.

	changes over time.					
Skills	•Observing over time •Pattern seeking •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Observing over time •Pattern seeking •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Pattern seeking •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Observing over time •Pattern seeking •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Observing over time •Researching	•Pattern seeking •Identifying, Grouping and Classifying •Researching •Observing over time
KS2 – Year 2 cycle	**Animals Including Humans**  • Children can explain what gestation periods are for different animals, including humans. •With scaffolding and/or support, children can record data and results of increasing complexity using	**States of matter**  • Children compare and group materials together, according to whether they are solids, liquids or gases • Children can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	**Electricity**  •Children can define what an electrical appliance is and identify those that are mains- or battery powered. •Children can group and classify things (appliances) and record their findings using labelled diagrams.	**Sound**  •Children can explain how sound sources vibrate to make sounds. •Children can describe patterns between the pitch of a sound and the features of the object that made the sound.	**Plants**  •Children can explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. •Children can set up a simple comparative test investigating plant growth conditions. They are beginning to	**Evolution and Inheritance**  •Children can develop an understanding of the development of evolutionary ideas and theories over time. •Children can explain how human evolution has occurred and compare modern humans with those of the same genus and family.

	scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.  •Children can state the three main parts of the circulatory system and describe the job of the heart. • With scaffolding, children can identify scientific evidence that has been used to support or refute ideas or arguments.	**Properties and Changes of Materials**  • Children can identify the properties of materials with regards to transparency, hardness and magnetism. They can suggest appropriate and inappropriate materials for a range of purposes. •Children can plan an investigation to answer a question. They can identify variables that need to be controlled	 •Children can draw circuit diagrams using the correct symbols and label the voltage correctly. •Children can decide which variables to control while planning an investigation.		understand the importance of keeping some conditions the same.	
Skills	•Observing over time •Identifying, Grouping and Classifying •Researching	•Observing over time •Identifying, Grouping and Classifying •Comparative and fair testing	•Identifying, Grouping and Classifying •Comparative and Fair Testing •Researching	•Pattern Seeking •Comparative and Fair Testing •Researching	•Observing over time •Identifying, Grouping and Classifying •Comparative and fair testing •Researching	•Identifying, Grouping and Classifying •Researching