Autumn 1: The Human Body
 LO: To know that we can control our voluntary muscles, but we do not control our involuntary muscles. Success criteria: I know muscles help us move and keep us alive. I know some of our muscles are voluntary muscles that we control, such as our biceps. Some of our muscles are involuntary muscles that we do not control, such as our heart.
 LO: To know our bones help us to move and protect some parts of our bodies. Success criteria: I know our bones give us shape, allow us to move and protect our bodies. I know humans have a skeleton inside our bodies. This is called an endoskeleton. I know a joint is the place where our bones come together, connected by tissue called ligaments.
 LO: To know that the brain is the centre of the nervous system. Success criteria: I know the brain sends messages around our bodies through our nervous system. I know the brain is divided into different parts; each one has a different job to do. I know our brain is connected to our spinal cord which passes messages to nerves in our arms, fingers, legs and toes.
 LO: To understand how the brain and mouth start the digestive process. Success criteria: I know when we see food, a signal is sent from the eyes to the brain. I know our brain tells our mouth to prepare to eat. I know our brain tells our stomach to prepare for food.
 LO: To describe the simple functions of the basic parts of the digestive system in humans Success criteria: I know that the purpose of digestion is to break down food enough that it can be processed in the body. I know the basic parts of the digestive system. I understand the function of each basic part of the digestive system.
 LO: Assessment- To be able to describe one of the many systems in our body. Success criteria: I know our body contains different systems that enable us to grow, move and respond to the world around us. I know our digestive system breaks down food into energy and nutrients. I know the brain sends messages around our bodies through our nervous system I know the skeletal system support and protects our bodies I know the muscular system enables us to move our bodies

	Autumn 2: Rocks
Lesson 1:	 LO: To know that there are many different types of rocks. Success criteria: I understand there are many types of rocks. I know different rocks have names and can be sorted into groups according to their properties.
Lesson 2:	 LO: To know that geologists sort rocks into three different groups. Success criteria: I know that the three main groups of rock are called sedimentary, igneous and metamorphic. I know that sedimentary rocks are formed by layers of sediment under the sea. I know that metamorphic socks are formed under immense heat and pressure and I know igneous rocks are formed by volcanoes.
Lesson 3:	 LO: To know the difference between permeable and impermeable rocks Success criteria: I know rocks can have small air spaces in them allowing water to pass through them I know that if a rock type allows water to pass through it is called permeable rock. I know rocks that are permeable will give off air bubbles when put in water.
Lesson 4:	 LO: To know that some rocks contain fossils which can tell us about life millions of years ago. Success criteria: I know fossils are formed when rock forms around things that once lived. I know fossils are rare and take thousands of years to form. I know scientists who study fossils are called palaeontologists.
Lesson 5:	 LO: To recognise that soils are made from rocks and organic matter Success criteria: I knows soil is made from rocks and organic matter. I know organic matter is made from the decaying remains of living things.
Lesson 6: Assessment	 LO: Assessment lesson- To explain rocks and what they can tell us about our planet. Success criteria: I know rocks are classified by how they are formed: sedimentary, igneous and metamorphic. I know rocks can also be classified by their properties such as whether they are hard or whether they are permeable I know fossils are formed over a long period of time from the remains of plants and animals that have died. I know soil is a mixture of small pieces of rock with dead organic matter.

	Spring 1: Forces and magnets
Lesson 1:	 LO: To know that a force is a push or a pull. Success criteria: I know gravity is a force that makes objects fall to the ground. I know the effect of a force is to make something move, or change speed or direction, or change shape. I know we can change the amount of force we use when we push and pull things.
Lesson 2:	 LO: To know that friction is the force between two surfaces. Success criteria: I know that when a car rolls down a slope, the force of friction can slow it down. I know that rough surfaces create greater friction. I know that smooth surfaces create less friction.
Lesson 3:	 LO: To know that magnets have an invisible push or pull force. Success criteria: I know that magnetic force is an invisible push or pull force. I know that when a magnet pushes an object away, we say it repels it. I know if a magnet pulls an object towards it, we say it attracts it. I know a lodestone is a naturally occurring rock that has magnetic properties.
Lesson 4:	 LO: To know that magnets have poles and a magnetic field. Success criteria: I know a magnet has two opposite poles, the north and south pole. I know a magnetic field is the space around a magnet where the magnetic force can be felt.
Lesson 5:	 LO: To know that magnetic forces are not all the same strength. Success criteria: I know larger magnets are often, but not always the strongest. I know the strength of magnetic force can be tested. I know magnetic strength can be weakened over time.
Lesson 6: Assessment	 LO: Assessment and double page spread. Success criteria: I know gravity is a force that causes things to fall to the ground when dropped. I know friction is a force between two objects that slows down the moving object. I know magnets have two poles and like poles repel whereas unlike poles attract. I know magnets have different strengths.

	Spring 2: Light
Lesson 1:	LO: To understand that we need light in order to see things. Success criteria: I know light allows us to see things. Darkness is the absence of light. I know the sun is the most important source of light for life on earth.
Lesson 2:	 LO: To know that transparent materials let light through and opaque materials block light from passing through. Success criteria: I know light travels in straight lines. I know transparent materials allow light to pass through them. I know opaque materials block light from passing through them.
Lesson 3:	LO: To know mirrors can reflect light in different ways depending on their shape. Success criteria: I know mirrors reflect light. I know convex mirrors are arched. I know concave mirrors have a hollow. I know mirrors of different shapes reflect light differently.
Lesson 4	 LO: To our shadows change size throughout the day. Success criteria: I know a shadow is created when an object blocks the path of light. I know the Sun appears to move across the sky as our planet revolves on its axis. I know our shadows change in size and shape throughout the day.
Lesson 5	 LO: To our shadows change size throughout the day. (Part 2 Investigation) Success criteria: I know a shadow is created when an object blocks the path of light. I know the Sun appears to move across the sky as our planet revolves on its axis. I know our shadows change in size and shape throughout the day.
Lesson 6: Assessment	LO: To know that light is essential for life on earth. Success criteria: I know we need light in order to see things and that dark is the absence of light I know light is essential for life on earth. I know light is reflected from some surfaces such as mirrors I know sometimes light from the sun can be dangerous and we can protect ourselves from this.

	Summer 1: Plants
Lesson 1:	 LO: To know that flowering plants all have roots, a stem or trunk, leaves and flowers but not all flowering plants look the same. Success criteria: I know a botanist is a scientist who studies plants. I know botanists look closely at plants and study their features. I know flowering plants have roots, stem/trunk, leaves and flowers.
Lesson 2:	LO: To now that different plants need different things in order to thrive. Success criteria: I know around the world, there are many different types of plant. I know that some plants need lots of water to grow, others only need a little. I know that some plants thrive in the shade, others need a lot of sunlight.
Lesson 3:	 LO: To know that water moves from the roots of a plant, upwards via the stem. Success criteria: I know plants absorb water from the soil to help them to live and grow. I know water moves around the plant via the stem. I know plants with large root systems can take more water from the soil.
Lesson 4:	 LO: To know that pollination is needed for flowering plants to reproduce. Success criteria: I know flowering plants create seeds. I know flowering plants can only produce seeds if pollen is transferred from the anther to the stigma. I know insects, like bees and butterflies are essential for pollination.
Lesson 5:	 L.O: To understand that plants spread their seeds in many different ways to reproduce. Success criteria: I know plants spread their seeds in order to reproduce. I know some plants rely on the wind to spread their seeds. I know some plants rely on animals to spread their seeds.
Lesson 6: Assessment	 LO: To understand flowering plants are living things that reproduce. Success criteria: I know flowering plants all have roots, a stem or trunk, leaves and flowers but not all flowering plants look the same. I know flowering plants create seeds. I know flowering plants can only produce seeds if pollen is transferred. I know conditions, including moisture and warmth, must be right for a seed to germinate and grow into a new plant.