SCIENCE Long Term Planning – Summary of YEAR 3 Units

AUTUMN 1	AUTUMN 2
Rocks - Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties - Suggest reasons why certain rocks or stones are used for a specific purpose - Describe in simple terms how fossils are formed when things that have lived are trapped within rock - Explain the terms 'weathering' and 'erosion' and describe the effect they have on different types of rocks and soils - Recognise that soils are made from rocks and organic matter - Study the work of Mary Anning in the discovery and understanding of fossils	**Animals including Humans** - Identify some of the most important bones in animals such as skull, ribs and spine, describing their primary functions - Classify and group animals into vertebrates or invertebrates - Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat - Identify the different food groups and design a healthy meal based upon these food groups - Describe how each of the main food groups specifically benefit the human body for growth and health - Identify that humans and some other animals have skeletons and muscles for support, protection and movement
SPRING 1	**SPRING 2**
Light - Recognise that they need light in order to see things and that dark is the absence of light - Classify a range of objects as either light sources or light reflectors - Notice that light is reflected from surfaces, using equipment such as mirrors to demonstrate - Recognise that light from the sun can be dangerous and that there are ways to protect their eyes - Recognise that shadows are formed when the light from a light source is blocked by an opaque object - Find patterns in the way that the size of shadows change	**Plants** - Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers - 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 - Investigate the way in which water is transported within plants - Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal - Sort and classify a range of seeds into broad dispersal methods, such as wind (dandelion), water (coconut), or animal (yew) (Continued in Summer 1)
SUMMER 1	**SUMMER 2**
Plants - Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers - 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 - Investigate the way in which water is transported within plants - Explore the part that flowers play in the life cycle of flowering plants, including pollination,	**Forces & Magnets** Compare how things move on different surfaces, making predictions and measuring the distance travelled Notice that some forces (eg friction) need contact between 2 objects, but magnetic forces can act at a distance Observe how magnets attract or repel each other and attract some materials and not others Compare and group together a variety of everyday materials on the basis of whether they are

seed formation and seed dispersal - Sort and classify a range of seeds into broad dispersal methods, such as wind (dandelion), water (coconut), or animal (yew)	attracted to a magnet, and identify some magnetic materials Describe magnets as having 2 poles Predict whether 2 magnets will attract or repel each other, depending on which poles are facing Name a range of familiar daily activities which rely upon or are caused by forces and magnets