Year 3 & 4 Science Assessment Cycle 1

KS2 Working Scientifically	E	D	S	M
Asks relevant questions and uses different types of scientific enquiry to answer questions.				
Sets up simple practical enquiries, comparative and fair tests.				
Makes systematic and careful observations and, where appropriate, takes accurate measurements using standard units, using a range of equipment, including thermometers & data loggers				
Gathers, records, classifies and presents data in a variety of ways to help in answering questions.				
Records findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.				
Reports on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.				
Uses results to draw simple conclusions, make predictions, suggest improvements and raise questions.				
Identifies differences, similarities or changes related to simple scientific ideas and processes				
Uses straightforward scientific evidence to answer questions or to support their findings.				
Uses appropriate scientific vocabulary in their explanations.				

KS2 Scientific Knowledge	E	D	S	M
Autumn				
Identify common appliances that run on electricity.				
Construct a simple series electrical circuit, identifying and naming its basic parts, including cell, wires, bulbs, switches and buzzers.				
Identify whether a bulb will light in a complete or incomplete circuit.				
Recognise that a switch opens and closes a circuit and the effect this has on the bulb.				
Recognise some common conductors (understand metals are good conductors) and insulators.				
Understands how to use electricity safely.				
Identifies how sounds are made, associating them with something vibrating.				
Recognises that vibrations from sounds travel through the medium to the ear.				
Finds patterns between the pitch of a sound and the features of the object that produced it.				
Finds patterns between the volume of a sound and the strength of the vibrations that produced it.				
Recognise that sound gets fainter as the distance from the sound source increases.				
Spring				
Compare and group together different kinds of rocks, based their appearance and simple physical properties.				
Describe in simple terms how fossils are formed when things that have lived are trapped within a rock.				
Recognise that soils are made from rocks and organic matter.				
Compare how objects move on different surfaces (friction).				
Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance.				
Observe how magnets attract and 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 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.				
Summer				
Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.				
Understand what plants need for life and growth (air, light, water, nutrients and room to grow) and how they vary from plant to plant and how environmental factors can affect this.				
Understand how water is transported within plants.				
Understand the role of flowers in the life cycle of a flowering plant, including pollination, seed formation and seed dispersal.				
Identify that humans and some other animals have skeletons and muscles for support, protection and movement.				
Construct and interpret a variety of food chains, identifying producers, predators and prey.				
Recognise that living things can be grouped in a variety of ways.				
Use classification keys to help group, identify and name a variety of living things in their local and wider environment.				
Recognise that environments can change and that this can sometimes pose dangers to living things.				