Edison Achievement Statements Years 1-6

Year 1	Year 1 Learners can
Plants	identify and name a variety of common plants, including garden plants, wild plants and trees, and those classified as deciduous and evergreen identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers.
Seasonal Change	observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.
Everyday materials	identify and name a variety of everyday materials including; wood, plastic, glass, water and rock compare and group together a variety of everyday materials on the basis of their simple physical properties distinguish between an object and the material which it is made describe some of the physical properties of everyday materials
Animals including humans	name and identify common animals including fish, amphibians, reptiles, birds and mammals compare the structure of a variety of common animals including fish, amphibians, reptiles, birds, mammals and pets name and identify carnivores, herbivores and omnivores identify, name, draw and label the basic parts of the human body and link parts to my senses
Working Scientifically Key stage 1	ask simple questions and recognise that they can be answered in different ways observe closely, using simple equipment perform simple tests identify and classify use my observations and ideas to suggest answers to questions I can gather and record data to help me answer questions

Year 2	Year 2 Learners can
Plants	observe and describe how seeds and bulbs grow into mature plants find out and describe how plants need water, light and a suitable temperature to grow and stay healthy
Everyday materials	find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
Living things and their habitats	explore and compare the differences between things that are living and dead and have never been alive identify and describe different habitats and how they provide for the basic needs for different animals and plants and how they depend on each other describe how animals obtain their food from other animals, using the idea of a simple food chain identify that most living things live in habitats that they are suited identify and name a variety of plants and animals in their habitats, including micro-habitats identify and name different sources of food using the idea of a simple food chain

Animals including humans	notice that animals, including humans have offspring which grow into adults find out and describe the basic needs of animals including humans for survival describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene
Working Scientifically Key stage 1	ask my own questions about what I notice use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions: • observing changes over time • noticing patterns • grouping and classifying things • carrying out simple comparative tests • finding things out using secondary sources of information communicate my ideas, what I do and what I find out in a variety of ways

Year 3	**Year 3 Learners can**
Plants	identify and describe the functions of different parts of flowering plants explore the requirements of plants for life and growth and how they vary from plant to plant investigate the way in which water is transported within plants explore the parts that flowers play in the life cycle of flowering plants
Forces and magnets	compare how things move on different surfaces notice that some forces need contact between two 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 attracted to a magnet identify some magnetic materials describe that magnets have 2 poles predict if 2 magnets will attract or repel by looking at the poles
Rocks	compare and group together different types of rocks based on their appearance and physical simple properties describe in simple terms how fossils are formed when things that have lived are trapped within rock recognise that soil is made from rocks and organic matter
Light	recognise that we need light to see in order to see things and that darkness is the absence of light notice that light is reflected from surfaces 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 a opaque object find patterns in the way that the size of shadows change
Animals including humans	identify that animals including humans need the right types and amount of nutrition identify that animals, including humans, cannot make their own food, they get nutrition from what they eat identify that humans and some other animals have skeletons and muscles for support, protection and movement
Working Scientifically	ask relevant questions and use different types of scientific enquiry to answer them set up simple practical enquiries, comparative and fair tests

Lower Key stage 2	make systematic and careful observations take accurate measurements, where appropriate, using standard units use a range of equipment, including thermometers and data loggers gather, record, classify and present data in a variety of ways to help in answering questions record my findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions identify differences, similarities or changes related to simple scientific ideas and processes use straightforward scientific evidence to answer questions or to support their findings.

Year 4	**Year 4 Learners can**
Living things and their habitats	recognise that living things can be grouped in a variety of ways explore and 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 this can sometimes pose dangers to living things
Animals including humans	describe the simple functions of the basic parts of the digestive system in humans identify the different types of teeth in humans and their simple functions construct and interpret a variety of food chains, identifying producers, predators and prey.
States of Matter	compare and group materials together, according to whether they are solids, liquids or gases observe that some materials change state when they are heated, cooled and measure or research the temperature at which it happens identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
Sound	identify how sounds are made, associating some of them with something vibrating recognise that vibrations from sounds travel through something to the ear find patterns between the volume of a sound and the strength of the vibrations that produced it find patterns between the pitch of a sound and features of what produced it recognise that sounds get fainter at the distance from the sound source increases
Electricity	identify common electrical appliances construct a simple electrical circuit, identifying its parts including cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some simple conductors and insulators
Working Scientifically Lower Key stage 2	ask relevant questions and use different types of scientific enquiry to answer them set up simple practical enquiries, comparative and fair tests make systematic and careful observations take accurate measurements, where appropriate, using standard units use a range of equipment, including thermometers and data loggers gather, record, classify and present data in a variety of ways to help in answering questions record my findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables

	use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions identify differences, similarities or changes related to simple scientific ideas and processes use straightforward scientific evidence to answer questions or to support their findings.

Year 5	**Year 5 Learners can**
Living things and their habitats	describe the differences in life cycles of mammals, amphibians, insects and birds describe the life process of reproduction in some plants and animals
Animals including humans	describe the changes as humans develop to old age
Properties and change of materials	compare and group together everyday materials on the basis on their properties, including their properties, including their hardness solubility, transparency, conductivity and response to magnet recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance form a solution use knowledge of solids, liquids, and gases to decide how mixtures might be separated through filtering, sieving and evaporating give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials including metals, wood and plastic demonstrate that dissolving, mixing and changes of state are reversible changes explain that some changes result in the formation one materials, and that this kind of change is not usually reversible
Earth and Space	describe the movement of the Earth and other planets in our solar system relative to the Sun describe how the moon moves in relation to the earth describe the Sun, Earth and Moon as approximately spherical talk about Earth's rotation to explain day and night and the apparent movement of the Sun across the sky
Forces	explain that unsupported objects fall towards the Earth because of the force of gravity identify the effects of air resistance, water resistance and friction recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect
Working Scientifically Upper Key stage 2	plan different types of scientific enquiry to answer questions including recognising and controlling variable where necessary take measurements, using a range of scientific equipment with increasing accuracy and precision, taking repeat readings where appropriate record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs use straightforward scientific evidence to answer questions or to support their findings. identify scientific evidence that has been used to support of refute ideas or arguments identify differences, similarities or changes related to simple scientific ideas and processes. use test results to make predictions to set up further comparative and fair tests report and present findings, including conclusions, casual relationships and explanations of results report and present findings in oral and written forms such as displays and other presentations.

Year 6	**Year 5 Learners can**
Living things and their habitats	describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals give reasons for classifying plants and animals based on specific characteristics
Animals including humans	identify the main parts of the human circulatory system and describe their functions recognise the impact of diet, exercise, drugs and lifestyle on our bodies describe the ways in which nutrients and water are transported within animals, including humans
Evolution and inheritance	recognise that living things have changed over time and that fossils provide information about things that lived on the Earth millions of years ago recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents identify how animals and plants are adapted to suit their environment in different ways and that adaption may lead to evolution
Light	recognise that light appears to travel in straight lines use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. explain that we see things because of the way light travels use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
Electricity	associate the outcome of a circuit with a number and voltage of the cells used compare and give reasons for variations in how components function, including the brightness of bulbs, loudness of buzzers and the on/off positions of switches use recognised symbols when representing a simple circuit in a diagram
Working Scientifically Upper Key stage 2	describe and evaluate my own and others' scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources ask my own questions about the scientific phenomena that I am studying, and select the most appropriate ways to answer these questions, recognising and controlling variables where necessary (i.e. observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests, and finding things out using a wide range of secondary sources) use a range of scientific equipment to take accurate and precise measurements or readings, with repeat readings where appropriate record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs draw conclusions, explain and evaluate their methods and findings, communicating these in a variety of ways raise further questions that could be investigated, based on their data and observations.