Year 3 Progressions of Skills - Science

2025/26	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Enrichment opportunities						
Science	Animals - movement and nutrition	Forces and Space: Forces and Magnets	Materials: Rocks and Soil	Energy: Light and Shadows	Plants: Plant Reproduction	Making Connections: Does hand span affect grip strength?
Knowledge						
	To know that animals can be grouped based on the presence of a skeleton. To know that the skeleton in humans and some animals is used for movement, protection and support. To know that the muscular system in humans and some animals works with the	To know some examples of contact and non-contact forces. To know that some forces are a result of contact between two surfaces, but some forces can act at a distance (e.g. magnetism). To know the North and South poles of a magnet.	To know that rocks can be grouped based on their appearance or properties, (e.g. colour, texture, hardness, permeability.) To know that rocks may contain grains, crystals or fossils. To know that grains and crystals appear differently and can be used to classify rocks.	To know that light travels from a source (e.g. the Sun, light bulbs and torches). To know that light is needed to see things and that dark is the absence of light. To know that light from the Sun can be dangerous and how to protect their eyes. To know that all	To understand the functions of the basic parts of a plant and the relationship between structure and function. To know that water is transported within a plant from the root, through the stem, to the leaves. To know that plants need water, light, air, nutrients and a suitable temperature for growth	To revise units movements and nutrition and Rocks and soil. To revise units movements and nutrition and plant reproduction. To revise units of force and magnets. To revise the unit uses of materials.

	skeleton for movement. To know the main bones in the body. To know that animals, including humans, need the right types and amount of nutrition. To understand that humans cannot make their own food and therefore eat to get the nutrition needed. To know the main nutrient groups (carbohydrates, protein, fats, fibre, vitamins, minerals and water) and their simple functions. To know that a balanced diet should include all nutrient groups. To describe the diets of different animals.	To know some examples of magnetic materials, including iron and nickel, and how they react to a magnet and each other. To know some different examples of magnets, including bar, horseshoe, button and ring, To know some uses of magnets. To know that friction is a contact force that acts between two surfaces to slow an object down. To know that magnetism is a non-contact force that affects objects containing magnetic metal. To understand that the opposite poles of a	To know that soils are made from rocks and dead matter. To understand the relationship between the properties of rocks and their uses To know that fossils can form from the remains of living things. To know that rocks can change over time (e.g. erosion, weathering).	materials reflect light. To know that shadows are formed when the light from a light source is blocked by an opaque object. To know that shadows change as a result of different factors: - Changing the position of the light source. - Changing the distances between the light source, object and surface. To know that shadows change position and length throughout the day as the Sun changes position in the sky.	and health. To understand that the needs for growth and health vary from plant to plant. To know the life cycle of a plant from seed to mature plant. To know that flowers are the reproductive organ of a plant. To know that the process of pollination is the transfer of pollen to the female (part of the) flower. To know that the process of seed formation is the growth of a seed after pollination.. To know some different methods of seed dispersal and the benefits of each.	To revise the units lights and shadow and movements and nutrition.

		magnet attract one another and like poles repel one another. To know that rougher surfaces have more friction between them than smoother surfaces. To understand that the strength of different magnets may vary.				
Working scientifically						
	To group animals based on their physical properties. To measure and sort data. To explore scientific advances. To gather and compare data to answer questions.	To label a diagram using arrows and scientific vocabulary. To write a scientific conclusion identifying cause and effect. To plan an investigation using variables.	To observe the appearance of rocks closely, using a magnifying glass. To make predictions, suggest improvements and explain observations over time. To present research on fossil formation.	To plan and draw a results table. To ask testable questions and plan how to answer them. To evaluate a method. To find patterns in data and form conclusions. To recall how different	To pose relevant questions. To design simple results tables. To plan a simple enquiry To complete, read and interpret data in a bar chart.	To plan a pattern seeking enquiry. To gather and record data. To conclude and evaluate the investigation. To use sets of data to inform design.

	To record information using secondary sources. To explore how knowledge has progressed over time and how different jobs use this information.	To write a method. To display data using a bar chart. To research the uses of magnets.	To use the fossil record to answer questions about the past. To record the drainage rate for different soils in a bar chart. To draw and label a diagram.	people work with light and shadows.	To identify and suggest changes to an enquiry. To use results to draw conclusions.	To report my findings using a puppet display.