

Science at Thomlinson Junior School 2024 2025

	Year 3	Year 4	Year 5	Year 6
Autumn	<ul style="list-style-type: none"> ● Magnets and Forces <ul style="list-style-type: none"> ● Compare how things move on different surfaces ● Explore push/pull ● Contact forces & 'distance' forces (gravity/magnetism) ● Magnets attract / repel; two poles ● Compare/group materials with magnets ● Rocks <ul style="list-style-type: none"> ● Compare on physical properties ● Fossil formation ● Recognise soils are made from rocks & organic matter 	<ul style="list-style-type: none"> ● Living Things and Habitats <ul style="list-style-type: none"> ● Recognise living things can be grouped in different ways ● Explore & use keys. Identify/name variety of living things in environment ● Recognise environments change & pose dangers to living things ● Electricity <ul style="list-style-type: none"> ● Identify common appliances ● Construct simple circuit ● Series circuit. Switches ● Common conductors and insulators 	<ul style="list-style-type: none"> ● Earth and Space <ul style="list-style-type: none"> ● Describe movement of earth relative to sun & planets ● Describe movement of moon relative to earth ● Sun, earth, moon are spherical ● Explain day/night & movement of sun across sky ● Living Things <ul style="list-style-type: none"> ● Life cycles of mammal, amphibian, an insect & a bird ● Describe reproduction in some plants & animals (inc. sexual/asexual) 	<ul style="list-style-type: none"> ● Evolution and Inheritance <ul style="list-style-type: none"> ● Living things change over time (fossil evidence) ● Recognise offspring may vary/non-identical to parents ● Explain how adaptation leads to evolution ● Electricity <ul style="list-style-type: none"> ● Explain variation in brightness, loudness with number & voltage of cells used. ● Explain variations in component function (brightness, loudness, on/off) ● Recognise symbols in circuit diagram
Spring	<ul style="list-style-type: none"> ● Light <ul style="list-style-type: none"> ● Recognise need light to see things; dark is absence of light ● Light can be reflected ● Light from sun can be dangerous to eyes ● Shadows (light blocked) ● Patterns in the size of shadow ● Animals including humans <ul style="list-style-type: none"> ● Get nutrition from food ● Skeletal/muscular system (simple names) & functions ● Life cycle of bird & mammal 	<ul style="list-style-type: none"> ● States of Matter <ul style="list-style-type: none"> ● Groups as solids, liquids, gases—compare ● Explain change state with heating & cooling (°C) ● Role of evaporation & condensation in water cycle ● Sound <ul style="list-style-type: none"> ● Identify how sounds are made ● How sounds travel through medium to ear (vibration) ● Explain sound travels away from source. Gets fainter. ● Patterns in pitch & object, ● Patterns in volume & vibration 	<ul style="list-style-type: none"> ● Properties and Change of Materials <ul style="list-style-type: none"> ● Compare/group materials based upon properties ● Explain dissolving to form a solution. Recovery. Separating mixtures ● Reasons for material uses based upon testing evidence ● Dissolving, mixing, changes in state are reversible ● Irreversible changes ● Forces <ul style="list-style-type: none"> ● Explain objects fall towards earth due to force of gravity ● Effects of air/water resistance & friction ● Some mechanisms, Inc. levers, pulleys & gears, allow a smaller force to have greater effect 	<ul style="list-style-type: none"> ● Light <ul style="list-style-type: none"> ● Light travels in straight lines from a light source or reflected into the eye ● Ray model to explain size of shadows (prediction) ● Animals including Humans <ul style="list-style-type: none"> ● Identify/name parts of human circulatory system. Functions of heart, vessels & blood ● Impact of diet, exercise, drugs & lifestyle on body function ● Transport of water/nutrients in animals
Summer	<ul style="list-style-type: none"> ● What plants need <ul style="list-style-type: none"> ● Explore requirements for growth (air, light, nutrients, room) & how they vary ● Investigate transport of water ● Plant parts ● Identify/describe functions of parts (root, stem, leaf, flower) ● Role of flowers in life cycle (pollination, seed formation/dispersal) 	<ul style="list-style-type: none"> ● Animals including Humans <ul style="list-style-type: none"> ● Digestive system (simple) ● Teeth (Inc. structure/function) ● Construct food chains (producers, consumers, predators & prey) 	<ul style="list-style-type: none"> ● Animals including Humans <ul style="list-style-type: none"> ● Changes as humans develop to old age (Inc. puberty) 	<ul style="list-style-type: none"> ● Living Things and Habitats <ul style="list-style-type: none"> ● Describe classification into broad groups (animals, plants, microbes) based on observable features ● Reasons for classifying plants & animals based on specific characteristics