

# Slaters Progression in Vocabulary

## Introduction

- Bullet points denote statements from Science Programme of Study: Key Stage 3: National Curriculum in England or Development Matters.
- The vocabulary included for Nursery and Reception are words that children should be exposed to. They should use some correctly in a scientific context.
- The vocabulary included from Year 1 onwards are the words that children should know and use correctly in a scientific context. They should be able to define the specialist scientific vocabulary included.
- The vocabulary in red is from other linked topics. The topic they come from is indicated.
- The working scientifically vocabulary identified in the first table of this document should be taught through the topics in each year-group during practical work or scientific enquiry.

## Working scientifically

Year-group(s)	Vocabulary/Statement(s)
<b>Nursery &amp; Reception</b>	look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, record, sort, group
<b>Years 1 &amp; 2</b>	observe, changes, patterns, grouping, sorting, compare, same, different, identify (name), measure, data, record results, drawing, picture, table, tally chart, present, pictogram, block chart, Venn diagram, ask questions, test, investigate, explore, equipment, resources, magnifying glass, hand lens, ruler, tape measure, metre stick, pipette, syringe, spoon, teaspoon, answer questions, interpret results, scientific enquiry, pattern seeking, comparative testing, observing over time, classifying, researching using secondary sources
<b>Years 3 &amp; 4</b>	practical work, fair testing, relationships, accurate, thermometer, data logger, stopwatch, timer, estimate, data, diagram, identification key, chart, bar chart, prediction, similarity, difference, evidence, information, findings, criteria, values, properties, characteristics, conclusion, explanation, reason, evaluate, improve
<b>Years 5 &amp; 6</b>	variables, independent variable, dependent variable, control variable, evidence, justify, argument (science), causal relationship, accuracy, precision, scatter graphs, bar graphs, line graphs, force meter

## Working scientifically

Year-group(s)	Vocabulary/Statement(s)
<b>Nursery &amp; Reception</b>	look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, record, sort, group
<b>Years 1 &amp; 2</b>	observe, changes, patterns, grouping, sorting, compare, same, different, identify (name), measure, data, record results, drawing, picture, table, tally chart, present, pictogram, block chart, Venn diagram, ask questions, test, investigate, explore, equipment, resources, magnifying glass, hand lens, ruler, tape measure, metre stick, pipette, syringe, spoon, teaspoon, answer questions, interpret results, scientific enquiry, pattern seeking, comparative testing, observing over time, classifying, researching using secondary sources
<b>Years 3 &amp; 4</b>	practical work, fair testing, relationships, accurate, thermometer, data logger, stopwatch, timer, estimate, data, diagram, identification key, chart, bar chart, prediction, similarity, difference, evidence, information, findings, criteria, values, properties, characteristics, conclusion, explanation, reason, evaluate, improve
<b>Years 5 &amp; 6</b>	variables, independent variable, dependent variable, control variable, evidence, justify, argument (science), causal relationship, accuracy, precision, scatter graphs, bar graphs, line graphs, force meter

## Plants

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil, names of plants they grow
<b>Reception</b>	tree, bush, herb, names of plants they see (Reception - Living things and their habitats)
<b>Year 1</b>	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, names of trees in the local area, names of garden and wild flowering plants in the local area
<b>Year 2</b>	light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling  names of plants in local habitats and micro-habitats (Y2 - Living things and their habitats)
<b>Year 3</b>	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport
<b>Year 4</b>	classification, classification keys (Y4 - Living things and their habitats)
<b>Year 5</b>	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings (Y5 - Living things and their habitats)
<b>Year 6</b>	flowering, non-flowering, mosses, ferns, conifers (Y6 - Living things and their habitats)
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms</li> </ul>

## Living things and their habitats

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	<p>natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern</p> <p>plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil (Nursery - Plants)</p>
<b>Reception</b>	<p>plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest)</p>
<b>Year 1</b>	<p>names of garden and wild flowering plants in the local area (Y1 - Plants)</p> <p>head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group (Y1 - Animals, including humans)</p> <p>weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length (Y1 - Seasonal changes)</p>
<b>Year 2</b>	<p>living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied</p> <p>light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants)</p> <p>offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, cat/kitten, caterpillar/butterfly) (Y2 - Animals, including humans)</p>
<b>Year 3</b>	<p>photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport</p>
<b>Year 4</b>	<p>classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</p> <p>herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)</p>
<b>Year 5</b>	<p>life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, cuttings</p>
<b>Year 6</b>	<p>vertebrates, fish, amphibians, reptiles, birds, mammals, warm-blooded, cold-blooded, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, mosses, ferns, conifers</p>
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta</li> <li>The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases</li> <li>The effects of recreational drugs (including substance misuse) on behaviour, health and life processes</li> <li>The structure and functions of the gas exchange system in humans, including adaptations to function</li> <li>The mechanism of breathing to move air in and out of the lungs</li> <li>The impact of exercise, asthma and smoking on the human gas exchange system</li> </ul>

## Animals, including humans

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> <li>Make connections between the features of their family and other families.</li> <li>Notice differences between people.</li> </ul>
<b>Nursery</b>	egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, fly, patterns, spots, stripes, grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see, blind, deaf
<b>Reception</b>	names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice, hair (e.g. black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (e.g. blue, brown, green, grey), skin (e.g. black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman
<b>Year 1</b>	head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group, parts of the human body including those within the school's RSE policy, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ears, tongue
<b>Year 2</b>	<p>offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, kitten/cat, caterpillar/butterfly), survive, survival, water, food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy)</p> <p>living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival (Y2 - Living things and their habitats)</p>
<b>Year 3</b>	nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine
<b>Year 4</b>	digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, rectum, anus, incisor, canine, molar, premolar, herbivore, carnivore, omnivore, producer, predator, prey
<b>Year 5</b>	<p>puberty, the vocabulary to describe sexual characteristics in line with the school's RSE policy</p> <p>life cycle, foetus, baby, child, adolescent, adult, reproduce, sexual, sperm, fertilises, egg, live young (Y5 - Living things and their habitats)</p>
<b>Year 6</b>	heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, cycle, circulatory system, diet, drugs, lifestyle
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta</li> <li>The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases</li> <li>The effects of recreational drugs (including substance misuse) on behaviour, health and life processes</li> <li>The structure and functions of the gas exchange system in humans, including adaptations to function</li> <li>The mechanism of breathing to move air in and out of the lungs</li> <li>The impact of exercise, asthma and smoking on the human gas exchange system</li> </ul>

## Evolution and inheritance

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>• Make connections between the features of their family and other families.</li> <li>• Notice differences between people.</li> </ul>
<b>Nursery</b>	natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern (Nursery - Living things and their habitats)
<b>Reception</b>	plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest) (Reception - Living things and their habitats)
<b>Year 1</b>	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud (Y1 - Plants)
<b>Year 2</b>	<p>light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling (Y2 - Plants)</p> <p>living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold (Y2 - Living things and their habitats)</p>
<b>Year 3</b>	<p>photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil (Y3 - Plants)</p> <p>soil, fossil, bone, flesh, minerals (Y3 - Rocks)</p>
<b>Year 4</b>	<p>environment, habitat, human impact, positive, negative, migrate, hibernate (Y4 - Living things and their habitats)</p> <p>herbivore, carnivore, omnivore, producer, predator, prey (Y4 - Animals, including humans)</p>
<b>Year 5</b>	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings (Y5 - Living things and their habitats)
<b>Year 6</b>	offspring, sexual reproduction, vary, characteristics, adapted, inherited, species, evolve, evolution
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>• Heredity as the process by which genetic information is transmitted from one generation to the next</li> <li>• A simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model</li> <li>• The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection</li> <li>• Changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction</li> </ul>

## Seasonal changes

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	<p>grow, shoot, die, dead (Nursery - Plants)</p> <p>egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young (Nursery - Animals, excluding humans)</p>
<b>Reception</b>	spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers
<b>Year 1</b>	weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length
<b>Year 2</b>	
<b>Year 3</b>	
<b>Year 4</b>	
<b>Year 5</b>	
<b>Year 6</b>	
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>The seasons and the Earth's tilt, day length at different times of year, in different hemispheres</li> </ul>

## Materials

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>• Explore materials with different properties.</li> <li>• Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	mix, stir, cook, hot, oven, microwave, change, burn, melt, hard, runny, set, freeze, freezer, cold, blended, hard, soft, bendy, stiff, wobbly, wood, plastic, paper, card, fabric
<b>Reception</b>	ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back
<b>Year 1</b>	object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through
<b>Year 2</b>	opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching
<b>Year 3</b>	<p>rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorbs water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, types of soil (e.g. peaty, sandy, chalky, clay) (Y3 - Rocks)</p> <p>magnetic force, magnet, attract, magnetic material, metal, iron, steel (Y3 - Forces and magnets)</p>
<b>Year 4</b>	<p>solid, liquid, gas, heating, cooling, state change, melting, freezing, melting point, boiling, boiling point, evaporation, condensation, temperature, water cycle</p> <p>electrical conductor, electrical insulator, metal, non-metal (Y4 - Electricity)</p>
<b>Year 5</b>	thermal insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material
<b>Year 6</b>	
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>• Chemical reactions as the rearrangement of atoms</li> <li>• Representing chemical reactions using formulae and using equations</li> <li>• Combustion, thermal decomposition, oxidation and displacement reactions</li> <li>• Defining acids and alkalis in terms of neutralisation reactions</li> <li>• The pH scale for measuring acidity/alkalinity; and indicators</li> </ul>

## Rocks

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore materials with different properties.</li> <li>Explore natural materials, indoors and outside.</li> </ul>
<b>Nursery</b>	natural, shells, pebbles, stones
<b>Reception</b>	
<b>Year 1</b>	object, material, rock, brick, clay, hard, soft, waterproof, absorbent, rough, smooth, shiny, dull, see-through, not see-through (Y1 - Everyday materials)
<b>Year 2</b>	opaque, transparent, translucent, reflective, non-reflective (Y2 - Uses of everyday materials)
<b>Year 3</b>	rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorbs water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, types of soil (e.g. peaty, sandy, chalky, clay)
<b>Year 4</b>	
<b>Year 5</b>	
<b>Year 6</b>	evolution
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>The composition of the Earth</li> <li>The structure of the Earth</li> <li>The rock cycle and the formation of igneous, sedimentary and metamorphic rocks</li> </ul>

## Light

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
<b>Nursery</b>	light, torch, bulb, lamp, spotlight, shiny, bright, brighter, brightest, Sun, shine, glow, mirror
<b>Reception</b>	Sun, sunny, light, shadow, shady, clouds, torch, see-through, not see-through, source, light source
<b>Year 1</b>	<p>senses, see, eyes (Y1 - Animals, including humans)</p> <p>shiny, dull, see-through, not see-through (Y1 - Materials)</p>
<b>Year 2</b>	opaque, transparent, translucent, reflective, non-reflective (Y2 - Uses of everyday materials)
<b>Year 3</b>	light, light source, dark, absence of light, surface, shadow, reflect, mirror, Sun, sunlight, dangerous
<b>Year 4</b>	
<b>Year 5</b>	
<b>Year 6</b>	straight lines, light rays
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>The similarities and differences between light waves and waves in matter</li> <li>Light waves travelling through a vacuum; speed of light</li> <li>The transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface</li> <li>Use of ray model to explain imaging in mirrors, the pinhole camera, the refraction of light and action of convex lens in focusing (qualitative); the human eye</li> <li>Light transferring energy from source to absorber leading to chemical and electrical effects; photo-sensitive material in the retina and in cameras</li> <li>Colours and the different frequencies of light, white light and prisms (qualitative only); differential colour effects in absorption and diffuse reflection</li> </ul>

## Forces

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
<b>Nursery</b>	object, float, sink, water, up, down, top, bottom, push, pull, magnet, spring, squash, bend, twist, stretch, turn, spin, smooth, rough, fast, slow
<b>Reception</b>	float, sink, up, down, top, bottom, surface, move, roll, drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow, bounce
<b>Year 1</b>	
<b>Year 2</b>	flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching (Y2 - Uses of everyday materials)
<b>Year 3</b>	force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole
<b>Year 4</b>	
<b>Year 5</b>	force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears
<b>Year 6</b>	
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>Magnetic fields by plotting with compass, representation by field lines</li> <li>Earth's magnetism, compass and navigation</li> <li>Forces as pushes or pulls, arising from the interaction between two objects</li> <li>Using force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces</li> <li>Moment as the turning effect of a force</li> <li>Forces: associated with deforming objects; stretching and squashing – springs; with rubbing and friction between surfaces, with pushing things out of the way; resistance to motion of air and water</li> <li>Forces measured in Newtons, measurements of stretch or compression as force is changed</li> </ul>

## Sound

Year-group(s)	Vocabulary/Statement(s)
Birth to 3	<ul style="list-style-type: none"> <li>Repeat actions that have an effect.</li> </ul>
Nursery	sound, noise, loud, quiet, high, low, music, bang, blow, pluck, soft, hard, fast, slow, names of instruments
Reception	sound, noise, listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar
Year 1	senses, hear, ear (Y1 - Animals, including humans)
Year 2	
Year 3	
Year 4	sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, quiet, loud, insulation
Year 5	
Year 6	
Key Stage 3	<ul style="list-style-type: none"> <li>Waves on water as undulations which travel through water with transverse motion; these waves can be reflected, and add or cancel – superposition</li> <li>Frequencies of sound waves, measured in Hertz (Hz); echoes, reflection and absorption of sound</li> <li>Sound needs a medium to travel, the speed of sound in air, in water, in solids</li> <li>Sound produced by vibrations of objects, in loud speakers, detected by their effects on microphone diaphragm and the ear drum; sound waves are longitudinal</li> <li>Auditory range of humans and animals</li> <li>Pressure waves transferring energy; use for cleaning and physiotherapy by ultra-sound</li> <li>Waves transferring information for conversion to electrical signals by microphone</li> </ul>

## Electricity

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"><li>• Repeat actions that have an effect.</li></ul>
<b>Nursery</b>	battery, plug, socket, electricity, wire, sound, light, move
<b>Reception</b>	
<b>Year 1</b>	
<b>Year 2</b>	
<b>Year 3</b>	
<b>Year 4</b>	electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol
<b>Year 5</b>	
<b>Year 6</b>	circuit diagram, circuit symbol, voltage
<b>Key Stage 3</b>	<ul style="list-style-type: none"><li>• Electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as flow of charge</li><li>• Potential difference, measured in volts, battery and bulb ratings; resistance, measured in ohms, as the ratio of potential difference (p.d.) to current</li><li>• Differences in resistance between conducting and insulating components (quantitative).</li><li>• Static electricity</li></ul>

## Earth and space

Year-group(s)	Vocabulary/Statement(s)
<b>Birth to 3</b>	<ul style="list-style-type: none"> <li>Explore and respond to different natural phenomena in their setting and on trips.</li> </ul>
<b>Nursery</b>	
<b>Reception</b>	Sun, Moon, Earth, star, planet, sky, day, night, space, round, bounce, float
<b>Year 1</b>	
<b>Year 2</b>	
<b>Year 3</b>	light, light source, Sun, sunlight, dangerous (Y3 - Light)
<b>Year 4</b>	
<b>Year 5</b>	Sun, Moon, Earth, planets (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, Solar System, rotate, star, orbit
<b>Year 6</b>	
<b>Key Stage 3</b>	<ul style="list-style-type: none"> <li>Gravity force, weight = mass x gravitational field strength (g), on Earth <math>g=10</math> N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only)</li> <li>Our Sun as a star, other stars in our galaxy, other galaxies</li> <li>The seasons and the Earth's tilt, day length at different times of year, in different hemispheres</li> <li>The light year as a unit of astronomical distance</li> </ul>