ST JAMES'
PRIMARY SCHOOL

'In faith we grow and flourish'

# Science -Vocabulary progression

# Overview - Vocabulary progression

| Working scientifically | | | |
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| | **Key stage 1** | **Lower key stage 2** | **Upper key stage 2** |
| **Question, Plan and predict** | plan (1)<br>predict | fair (1)<br>investigate<br>investigation<br>method<br>variable<br>control variable<br>rate | hazard<br>model<br>safety (1)<br>testable<br>fair test |
| **Observe, test and measure Record** | diagram<br>group (1)<br>measure<br>observe<br>sort (1)<br>table (1)<br>research<br>test (1) | – | – |

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| **Conclude, Evaluate** | compare<br>difference (1)<br>pattern (1)<br>similarity<br>results (1) | conclusion<br>trustworthy<br>proof/prove | evidence<br>evaluate<br>reliable |
| **Observe, test and measure, Record** | – | bar chart<br>record<br>results table<br>stop watch<br>classify<br>classification key<br>degrees Celsius (3)<br>temperature<br>thermometer | anomaly (3)<br>data<br>estimate<br>line of best fit (3)<br>line graph<br>relationship<br>mean average<br>scale<br>secondary data/source<br>units |

**Words on this page are classified as Tier 2 words unless stated otherwise.*

| Science in action | | | | | |
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| **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| science<br>scientist | invention | n/a | ethics | discovery (1) | theory |

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| Scientific knowledge and understanding | | | | | | |
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| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Sensitive bodies | hearing (1)<br>senses (1)<br>sight (1)<br>smell (1)<br>taste (1)<br>touch (1)<br>touch | – | – | – | – | – |
| Comparing animals | amphibian<br>bird (1)<br>carnivore<br>diet<br>fish (1)<br>herbivore<br>mammal<br>omnivore<br>reptile | – | – | – | – | – |

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| **Plants** | bulb<br>deciduous<br>evergreen<br>flower (1)<br>fruit (1)<br>garden plants<br>growth (1)<br>leaf (1)<br>roots (1)<br>seed (1)<br>stem (1)<br>trunk (1)<br>wild plants | germinate<br>energy (2)<br>nutrient (2)<br>life cycle (2)<br>shoot | female (1)<br>flowering plant<br>male (1)<br>pollen<br>pollination<br>reproduction<br>seed dispersal<br>transport | N/A | N/A | N/A |

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| **Forces, Earth and Space** | deciduous tree<br>evergreen tree<br>season (1)<br>weather (1) | N/A | attract (2)<br>contact force<br>force (2)<br>friction (2)<br>magnet (2)<br>magnetic material<br>magnetism (2)<br>non-contact force<br>north pole<br>repel (2)<br>south pole | N/A | celestial bodies<br>day (daytime)<br>gravity (2)<br>moon (1)<br>night (nighttime)<br>orbit (2)<br>phase (2)<br>planet (1)<br>spherical<br>star (1)<br>year<br>Solar System<br>Mercury<br>Venus<br>Earth<br>Mars<br>Jupiter<br>Saturn<br>Uranus<br>Neptune<br>Pluto<br>air resistance<br>balanced (2)<br>gear<br>gravity<br>lever<br>pivot | N/A |

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| | | | | | pulley<br>surface area<br>unbalanced (2)<br>water resistance | |
| **Energy** | N/A | N/A | cast (a shadow)<br>light source<br>luminous<br>mirror<br>non-luminous<br>opaque<br>reflect<br>reflection<br>reflective (shiny)<br>shadow (1)<br>the Sun<br>translucent<br>transparent | air (1)<br>eardrum<br>insulator<br>pitch (2)<br>sound<br>vibration<br>volume (2)<br>appliance<br>battery/cell<br>bulb<br>buzzer<br>circuit (2)<br>electrical conductor<br>electrical insulator<br>electricity (1)<br>mains<br>motor<br>power source<br>property<br>switch (2)<br>wire (1) | N/A | light ray<br>pupil<br>ray diagram<br>reflective<br>cell<br>circuit diagram<br>current<br>resistance<br>voltage |

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| **Materials** | absorbent<br>fabric<br>glass (1)<br>metal (1)<br>material<br>object<br>plastic (1)<br>rock (1)<br>tough<br>waterproof (1)<br>wood (1) | elastic<br>flexible (2)<br>property<br>suitable (1) | crystal<br>fossil<br>grain<br>hard<br>hardness<br>rock<br>sediment<br>sedimentary rock<br>sedimentation<br>soft<br>soil | boiling<br>condensing<br>evaporating<br>evaporation rate<br>freezing<br>gas<br>liquid<br>melting<br>precipitation<br>solid<br>steam<br>the water cycle | dissolve<br>filtering (2)<br>insoluable<br>mixture<br>sieving<br>soluble<br>solution<br>burning<br>conductor<br>electrical conductivity<br>insulator<br>irreversible change<br>reversible change<br>rust<br>rusting<br>thermal conductivity<br>transparency | N/A |

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| **Habitats and Microhabitats** | – | alive (1)<br>dead (1)<br>depend (2)<br>energy (2)<br>food chain (2)<br>habitat (2)<br>life processes<br>microhabitat<br>minibeast<br>predator (2)<br>prey (2)<br>shelter (1) | – | – | – | – |
| **Life cycles and health** | – | basic needs<br>egg (1)<br>health (1)<br>hygiene (1)<br>life cycle (2)<br>live young<br>pupa<br>spawn<br>survive<br>teenager (1)<br>toddler (1)<br>tadpole | – | – | – | – |

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| **Movement and nutrition** | – | – | balanced (diet) (2)<br>bone (1)<br>carbohydrate<br>fat<br>fibre<br>invertebrate<br>joint<br>mineral<br>movement<br>muscle (1)<br>nutrient<br>protection<br>protein<br>skeleton<br>support<br>vertebrate<br>vitamin | – | – | – |

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| **Classification and changing habitats** | – | – | – | conservation (2)<br>deforestation (2)<br>endangered (2)<br>flowering plants<br>insect<br>nature reserve<br>non-flowering plants<br>pollution (2)<br>slug<br>snail<br>spider<br>worm | – | – |
| **Digestion and food** | – | – | – | canine<br>digest (2)<br>digestive system<br>faeces<br>incisor<br>large intestine<br>molar<br>mouth (1)<br>oesophagus<br>premolar<br>producer<br>saliva<br>small intestine<br>stomach (1) | – | – |

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| **Life cycles and reproduction** | – | – | – | – | adolescence (2)<br>asexual reproduction<br>characteristics (2)<br>fertilisation<br>germination<br>gestation<br>gills<br>incubation<br>lungs<br>mating<br>metamorphosis<br>offspring<br>ovule<br>pollen<br>pollination<br>reproduction (2)<br>sexual reproduction | – |
| **Human timeline** | – | – | – | – | foetus<br>gestation period<br>hormones<br>period (menustration)<br>puberty<br>period (menstruation) | – |

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| **Classifying big and small** | – | – | – | – | – | cold-blooded<br>conifer<br>exoskeleton<br>fern<br>life processes<br>microorganism<br>moss<br>organism<br>warm-blooded |
| **Circulation and health** | – | – | – | – | – | blood (1)<br>bloodstream<br>blood vessels<br>carbon dioxide<br>circulatory system<br>drug<br>heart (1)<br>heart rate<br>oxygen<br>pulse |

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| **Evolution and inheritance** | – | – | – | – | – | adaptation (2)<br>competition (2)<br>environment (2)<br>environmental (2)<br>evolution (2)<br>extinct (2)<br>fossil<br>gene<br>inherit<br>inheritance (2)<br>natural slection<br>parent (biological) (1)<br>population (2)<br>selective breeding<br>survival of the fittest (2)<br>variation (2)<br>natural selection |

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