



Shurdington Science Vocabulary

Vocabulary is one of the threads which runs through every curriculum area; in order to explain a science investigation or describe what they see, children need to have a bank of scientific words. Words are labels for key concepts in science and learning the words is crucial for childrens success however teaching them can be challenging as many of the scientific concepts are new to children and are abstract.

K Williams 2019 (Whizz, Pop, Bang)

Reception Scientific Vocabulary						
Animals, including humans		Plants	Materials	Earth and Space	Seasonal Change	Working Scientifically
herbivore carnivore omnivore human/ animal/ fish/ bird/	Human body face hair leg knee arm elbow back head/ toes ear hands eye fingers mouth nose/	tree petals trunk fruit branch roots leaves bulb flowers seed stem/	material/ metal wood rock plastic hard glass soft paper fabric smooth shiny rough/ freeze/ melt change/ push pull	Earth Moon Planet space Sun star	Season summer spring autumn/ winter day night light/lighter dark/darker shadow	investigate/ explore results

Year 1 Scientific Vocabulary						
Plants	Animals including humans	Everyday materials		Seasonal Change		Working Scientifically
<u>Plants</u> leaf root seed/ plant flower blossom petal/s stem <u>Trees</u> trunk/ branch bark/ bud fruit crown/ deciduous evergreen common wild plants garden plants	<u>Animals/Humans</u> Parts of the body: head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves <u>Types of animals</u> omnivore herbivore carnivore fish amphibians reptiles birds mammals <u>Senses</u> touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue	<u>Object</u> material wood plastic glass metal water rock brick clay paper fabrics elastic foil card/ cardboard/	<u>Properties</u> hard / soft stretchy stiff shiny dull rough / smooth bendy waterproof absorbent floppy breaks/tears	<u>Season</u> spring summer autumn winter <u>Weather</u> hot / warm cool / cold sun / sunny cloud / cloudy wind rain / raining snow / snowing hail / hailing sleet frost fog mist ice / icy rainbow thunder lightning storm	<u>Day</u> light / dark day / night day length/ sunrise/ sunset	question answer observe/ observing equipment identify classify / sort / group record diagram chart map data compare contrast describe biology chemistry physics

Year 2 Scientific Vocabulary						
Plants	Animals including humans		Living things and their habitats		Uses of everyday materials	Working Scientifically
water light shade sun warm cool grow suitable temperature healthy germination reproduction	<u>Animals</u> egg-chick-chicken egg-caterpillar-pupa- butterfly spawn-tadpole-frog lamb-sheep <u>Humans</u> baby-toddler-child- teenager-adult	offspring grow/th adults young / old nutrition reproduce/ reproduction <u>Survival</u> water food air exercise heartbeat breathing hygiene germs disease <u>Food groups</u> fruit vegetables, carbohydrates, protein, dairy, fats and oils.	living dead never been alive suited / suitable <u>Basic needs</u> food/ food chain sun-grass-cow-human alive healthy	<u>Habitats</u> seashore woodland ocean rainforest <u>Local Habitats</u> pond/ woodland/ field hills (Cleeve, Crickley, Cooper, Chosen) <u>Micro-habitats</u> under logs bushes fallen leaves stony path <u>Conditions</u> hot / warm / cold dry / damp / wet bright / shade / dark	opaque transparent translucent reflective non reflective flexible rigid absorbent shape push / pushing pull / puling twist / twisting squash / squashing bend / bending stretch / stretching	question answer observe observing equipment identify classify sort group record diagram chart map data compare contrast describe biology chemistry physics

Year 3 Scientific Vocabulary

<i>Plants</i>	<i>Animals including humans</i>	<i>Light</i>	<i>Rocks</i>	<i>Forces and magnets</i>	<i>Working scientifically</i>
<u>Structure</u> flowering plants roots stem / trunk leaves flowers <u>Function</u> nutrition support reproduction makes own food air light water nutrients from the soil room to grow fertiliser <u>Life cycle</u> flowers pollination seed formation seed dispersal photosynthesis pollen insect wind pollination seed formation seed dispersal wind dispersal animal dispersal water dispersal	<u>Diet</u> nutrition nutrients vitamins minerals fat protein carbohydrates sugars fibre water <u>Skeletons</u> support protection skulls – brain ribs – heart lungs joint <u>Muscles</u> movement pull contract relax	light light source see dark absence of light reflect reflective surface natural <u>Sources</u> star Sun Moon artificial torch candle lamp translucent transparent opaque shiny matt surface shadow reflect mirror sunlight dangerous	<u>Types of rocks</u> igneous sedimentary metamorphic rock stone pebble boulder soil marble chalk granite sandstone slate fossil grains crystals layers hard / soft hard/ soft texture absorb water sandy soil clay soil chalky soil peat	<u>Force</u> magnetic force push pull twist <u>Magnets</u> magnetic strength bar magnet ring magnet button magnet horseshoe magnet contact non-contact open surface magnet attract repel magnetic poles north pole south pole <u>Materials</u> metal iron steel	research relevant questions scientific enquiry comparative and fair test systematic careful observation accurate measurements <u>Equipment</u> thermometer data logger <u>Data</u> gather record classify present <u>Record</u> drawings labelled diagrams keys bar charts tables oral and written explanations conclusion predictions differences similarities change evidence keys secondary sources guides construct

Year 4 Scientific Vocabulary

<i>Electricity</i>	<i>Animals including humans</i>		<i>Sound/</i>	<i>Living things and their habitats</i>	<i>States of matter</i>	<i>Working scientifically</i>
<i>Appliances</i> cell/ wire/ bulb/ buzzer/ clip/ motor/ switch/ battery/ mains/ plug/ danger/ electrical safety/ insulator/ conductor/ open / closed/ complete circuit/ positive / negative/ connections/ loose connection/ short circuit/ metal / non-metal/	<i>Human digestive system</i> mouth/ tongue-mixes/ moistens/ saliva/ oesophagus/ transports/ stomach/ acid/ enzymes/ small intestine/ large intestine/ rectum/ anus/ carnivore/ herbivore/ omnivore/ food chain/ producers/ prey/ predators/ hibernate/	<i>Teeth/</i> incisors/ canines/ molars/ premolars/ brush/ floss/	<i>Sound Source</i> noise/ vibrate/ vibration/ travel/ solid/ liquid/ gas/ pitch (high/low)/ tune/ high/ low/ volume/ loud/ quiet/ fainter/ muffle/ vibrations/ insulation/ <i>Instrument</i> percussion/ strings/ brass/ woodwind/ tuned instrument/	<i>Animals</i> vertebrate/ invertebrates- vertebrate/ fish/ amphibians/ reptiles/ birds/ mammals/ <i>Plants</i> flowering plants/ non-flowering plants/ population/ development/ litter/ deforestation/ classification/ classification keys/ environment/ habitat/ human impact/ positive/ negative/ migrate/ hibernate/	solid/ liquid/ gas/ air/ oxygen/ powder/ grain / granular/ crystals/ ice / water/ steam/ water vapour/ heated/ heating/ cooled/ cooling/ temperature/ degrees/ Celsius/ solidify/ molten/ boil/ state/ change/ melting/ freezing/ melting point/ boiling point/ evaporation/ temperature/ water cycle/	<i>Research/</i> relevant questions/ scientific enquiry/ comparative and fair test/ systematic/ careful observation/ accurate measurements/ Equipment/ Thermometer/ data logger/ data- gather/ record/ classify/ <i>Record/</i> Drawings/ labelled diagrams/ keys/ bar charts/ tables/ oral and written explanations/ conclusion/ predictions/ differences/ similarities/ change/ evidence/ improve/ secondary sources/ guides/ keys/ construct/ interpret/

Year 5 Scientific Vocabulary

<u>Earth & space</u>	<u>Forces</u>	<u>Animals including humans</u>	<u>Living things and their habitats</u>	<u>Properties and changes</u>		<u>Working scientifically</u>
Earth planets Sun solar system Moon celestial body sphere / spherical rotate / rotation spin night and day star <u>Planets</u> Mercury Venus Mars Jupiter Saturn Uranus Neptune Pluto 'dwarf' planet orbit revolve geocentric model heliocentric model shadow clocks sundials astronomical clock	<u>Forces</u> fall gravity force/ Earth air resistance/ water resistance friction moving surfaces magnetic force/ magnet attract <u>Mechanisms</u> levers pulleys gears simple machines	<u>Human Development</u> baby child toddler teenager adult elderly gestation grow / grows / growing growth foetus embryo- womb/ development puberty	life cycle/ reproduction/ sexual/ asexual germination/ pollination stamen stigma reproduce sperm fertilises egg live young metamorphosis plantlets runners bulbs cuttings	solid/ liquid/ gas ice/ water/ steam water vapour heated/ heating cooled/ cooling temperature degrees Celsius melt Freeze/ solidify melting point molten/ boil	change of state soluble / insoluble transparency conductive magnets dissolve/ solution separate/ing filtering / sieving evaporating reversible changes non reversible irreversible evaporation/ insulation thermal/ insulator conductor burning chemical opaque translucent rusting residue	plan variables measurements accuracy precision repeat record data scientific diagrams labels classification keys tables scatter graphs bar graph/ line graph/ predictions comparative and fair tests report and present conclusions casual relationships explanations degree of trust oral and written display presentation/ evidence/ support / refute ideas arguments identify, classify and describe patterns systematic / quantitative measurements

Year 6 Scientific Vocabulary

<i>Animals including humans</i>	<i>Evolution and inheritance</i>	<i>Electricity</i>	<i>Living things and their habitats</i>	<i>Light</i>	<i>Working Scientifically</i>
circulatory system heart blood blood vessels pumps oxygen carbon dioxide lungs nutrients water diet exercise drugs lifestyle water muscles	evolution suited / suitable adapted / adaptation offspring characteristics vary / variation inherit / inheritance fossils sexual reproduction environment	appliances electrical circuit complete circuit circuit diagram symbol components cell battery positive/ negative terminal connection loose connection short circuit wire crocodile clip lamp brightness switch buzzer volume motor conductor insulator voltage current resistance danger	organism micro-organism fungus mushrooms classification keys environment fish amphibians reptiles birds mammals vertebrates invertebrates insects spiders snails worms flowering and nonflowering	light travels straight reflect reflection light source object shadows mirrors periscope rainbow filters straight lines light rays	plan variables measurements accuracy precision repeat record data scientific diagrams labels classification keys tables scatter graphs bar graph line graph predictions comparative and fair tests report and present conclusions casual relationships explanations degree of trust oral and written display presentation evidence support / refute ideas arguments identify, classify and describe patterns systematic / quantitative measurements

