Explorify

Scientific Vocabulary – National Curriculum, England

Language is vital for communication and children enjoy learning new words.

Children should be able to use the vocabulary (and derivations from the key words listed below) of preceding topics as well as those listed for their current science topic that in the English national curriculum is separated by year group. All the vocabulary listed here is taken from the science curriculum or related subjects, such as mathematics.

Be aware that words may have multiple meanings and children may not realise that in different contexts a word might mean something a little different – such as explore, record, argument. Note that photosynthesis isn't in the list simply because it's not in the statutory primary curriculum.

Science Topic	Year 1-2	Year 3-4		Year 5-6
Working scientifically	experience observe changes patterns grouping sorting classifying compare identify (name) data measure record equipment questions test investigate explore magnifying glass / hand lens same different	develop enquiry practical enquiry fair test comparative test relationships conclusion accurate thermometer data logger estimate data diagram key (identifying) table chart	bar chart results predictions explanation reason similarity difference question evidence information findings criteria values properties characteristics	variables evidence justify accuracy precision scatter graphs bar graphs line graphs argument (science) causal relationship

Science Topic	Year 1-2		Year 3-4	Year 5-6
Animals, including humans	names of common animals: fish, amphibians, reptiles, birds, mammals carnivores herbivores omnivores human body senses see hear feel smell taste habitat local environment pet wild animal insect minibeast food eat head neck body arms legs ears eyes nose mouth tongue hands	feet fingers toes elbows knees hair teeth grow healthy offspring adults young water air survive exercise hygiene egg chick chicken caterpillar pupa moth butterfly tadpole frog frog spawn lamb sheep calf cow foal horse	nutrition diet skeleton muscles protection support movement bones skull shell digestive system stomach small intestine large intestine oesophagus types of teeth: molar, pre-molar, incisor, canine saliva	puberty gestation period circulatory system heart lungs blood vessels blood lifestyle disease water transportation nutrient transportation oxygen air breathing exercise diet drugs

Science Topic	Year 1-2	Year 3-4	Year 5-6
Plants	plants wild plants garden plants evergreen trees deciduous trees common flowering plants flowers vegetables leaf/leaves flower blossom petal stem trunk branch root seed bulb bud growth grow habitat local environment leaf fall water light temperature healthy growth survive soil germinate stages of growth	functions nutrients nutrition air transport (water) life cycle pollination seed formation seed dispersal reproduce fertiliser	

Science Topic	Year 1-2	Year 3-4	Year 5-6
Living things and their habitats (including evolution and inheritance)	pond garden field park woodland sea shore river ocean forest rainforest stones rocks logs leaf litter habitat micro-habitat living dead not living alive healthy food food chain depend source of food shelter grow growth healthy	environment non-flowering plants ferns mosses flowering plants grasses vertebrate animals: fish, birds, mammals, amphibians, reptiles invertebrate animals: snails, worms, slugs, spiders, insects human impact – litter, deforestation, population increase, nature reserves	life cycles reproduction life processes sexual and asexual reproduction (plants) root cuttings classification microorganisms organisms evolution evolve adaptation variation inherit inheritance

Science Topic	Year 1-2	Year 3-4	Year 5-6
Materials	everyday materials wood paper plastic metal glass water rock brick stone fabric material foil elastic dough rubber card cardboard clay object make/made hard/soft shiny/dull stretchy/stiff rough/smooth bendy/not bendy waterproof/not waterproof transparent/opaque absorbent/not absorbent squash twist bend stretch		properties hardness solubility transparency electrical conductivity thermal conductivity magnetism dissolve solution substance separating mixing filtering sieving reversible change burning rusting reactions irreversible change

Science Topic	Year 1-2	Year 3-4	Year 5-6
Rocks and soils		rock soil fossil organic matter grains crystals sedimentary rock	
Science Topic	**Year 1-2**	**Year 3-4**	**Year 5-6**
States of matter		solid liquid gas temperature heat (heating) cool (cooling) water cycle evaporation condensation melting freezing	

Science Topic	Year 1-2	Year 3-4	Year 5-6
Earth and space	seasons seasonal change spring summer autumn winter weather sun sunshine rain snow sleet ice frost fog cloud hot cold storm sky earth night day		solar system planets: Mercury, Venus, earth, Mars, Jupiter, Saturn, Neptune, Uranus moon stars spherical bodies rotation orbit satellite

Science Topic	Year 1-2	Year 3-4	Year 5-6
Electricity		electricity simple circuit light bulb cell wire buzzer switch motor battery series circuit conductor insulator	voltage components symbols circuit diagram
Science Topic	**Year 1-2**	**Year 3-4**	**Year 5-6**
Forces		move movement surfaces forces push pull contact distance magnet bar magnet ring magnet horseshoe magnet attract repel poles (of magnets) magnetic materials	gravity air resistance water resistance friction levers pulleys gears springs

Science Topic	Year 1-2	Year 3-4	Year 5-6
Light		light dark (absence of light) reflect shadow opaque mirror reflective surface	light sources periscope
Science Topic	**Year 1-2**	**Year 3-4**	**Year 5-6**
Sound		sound vibration vibrate pitch volume insulation	