



Thornton-in-Craven Community Primary and Nursery School

Cam Lane, Thornton-in-Craven, North Yorkshire, BD23 3SX

Science Vocabulary Progression

<p>EYFS</p>	<p>Working Scientifically: Changes, colour, design, difference, environment, living things, materials, objects, places, similarity, texture, tools.</p> <p>Understanding the World (People and Communities): communities, customs, family, friends, lives, past, people, present, traditions, unique.</p> <p>Understanding the World (The World): animals, change, environment, immediate environment, plants, vary.</p> <p>Understanding the World (The World – Patterns): bark, brick, bumpy, covers, grates, rough, rubbings.</p> <p>Understanding the World (The World – Places): built, busy, church, cinema, empty, farm, flat, house, loud, maps, mosque, natural, noisy, park, path, pollution, quiet, road, school, supermarket, swimming pool, synagogue, temple, town, village.</p> <p>Understanding the World (The World – Living Things): butterflies, caterpillars, cats, chickens, chicks, cows, dogs, fish, flowers, guinea pigs, horses, kittens, lambs, leaves, piglets, pigs, plants, puppies, rabbits, sheep.</p> <p>Understanding the World (The World – Technology): image, knobs, movement, pictures, pulleys, sound, toys.</p>
<p>Year 1</p>	<p>Working scientifically: answer, biology, changes over time, chart, chemistry, classify, compare, contrast, criteria, data, describe, diagram, equipment, group, identify, map, name, observations, observe, patterns, physics, question, record, results, sort, test.</p> <p>Plants: blossom, branches, bud, bulb, common, deciduous tree, evergreen tree, flowers (daffodil, sunflower, tulip, rose, daisy), fruit, garden/flowering plants, leaves, petals, roots, seed, stem, trunk, vegetables, wild plants.</p> <p>Animals, including humans: amphibians (frogs, toads), arms, birds, body parts, carnivores (meat, cat, dog, lion, tiger, fox, shark, killer whale, eagle, hawk, snake), common animals, ears, elbows, environment, eyes, face, fish, habitat, hair, head, hear, herbivores (plants, cow, hamster, guinea pig, tortoise), knees, legs, mammals, mouth, neck, omnivores (meat and plants, badger, human, bear, chickens), pets (cats, dogs, fish), reptiles (turtles, snakes, lizards), see, senses, sight, smell, sounds, taste, teeth, touch.</p> <p>Everyday materials: absorbent/not absorbent, bending, bendy/not bendy brick, elastic, fabrics, foil, gas, glass, hard/soft, liquid, metal, paper, plastic, property, rock, rough/smooth, shiny/dull, solid, squashing, stretching, stretchy/stiff, twisting, water, waterproof/not waterproof, wood.</p> <p>Seasonal changes: autumn, cold, dark, day length, days, daytime, fog, hail, hot, hours, ice, light, months, moon, movement, rain, shadow, sleet, snow, spring, summer, sun, warm, wind, winter</p>

<p>Year 2</p>	<p>Working scientifically: answer, biology, changes over time, chart, chemistry, classify, compare, contrast, criteria, data, describe, diagram, equipment, group, identify, map, name, observations, observe, patterns, physics, record, results, sort, test.</p> <p>Living things and their habitats: adaptation, alive, bright, carnivore, characteristics, cold, conditions, consumer, damp, dark, dead, dry, excrete, feed, food, food chain, grow, habitat, healthy, heat, herbivore, hot, life processes, light, living/non-living, micro-habitat, move, never alive, ocean, omnivore, pond, producer, rainforest, reproduce, respire, respond to stimuli, seashore, shade, shelter, sound, touch, warm, wet, woodland.</p> <p>Plants (as for Year 1, plus) germination, grow, healthy, light, reproduction, suitable temperature, water.</p> <p>Animals, including humans: air, adult, baby, bacteria, balanced diet, carbohydrates, child, circulation, dairy, exercise, fats, fibre, fitness, food groups, germs, grow, growth, healthy, heart rate, hygiene, infection, life cycle, minerals, nutrition, offspring, predator, protein, reproduce, survival, teenager, toddler, unhealthy, vitamins, water.</p> <p>Uses of everyday materials (as for Year 1, plus): characteristics, classification, man-made, natural, properties.</p>
<p>Year 3</p>	<p>Working Scientifically: accurate measurements, bar charts, careful observation, changes, classify, comparative test, conclusion, construct, data, data logger, differences, drawings, equipment, evidence, fair test, gather, improve, interpret, keys, labelled diagrams, oral explanations, predictions, present, record, relevant questions, research, scientific enquiry, secondary sources, similarities, systematic, tables, thermometer, written explanations.</p> <p>Plants (as for previous years, plus): absorb, anchor, anther, carbon dioxide, competition for resources, evaporate, fertilisation, fertiliser, flowering plant, function, germination, growing and flowering, minerals, nutrients, optimum conditions, ovary, oxygen, photosynthesis, plant life cycle, plant tissues, pollination, pores (stomata), reproduction, requirements, seed dispersal, seed formation, stigma, structure, support, transport, well-aerated soil, well-drained soil.</p> <p>Animals, including humans (as for previous years, plus): ankle, arteries, backbone, ball and socket joints, bone, brain, branching blood vessels, capillaries, cardiovascular system, cartilage, collar bone (clavicle), contract, endoskeleton, exoskeleton, extensor, fibula, finger, fixed joints, flexor, foot, hand, heart, hinge joints, humerus, involuntary muscles, joints, knee cap (patella), ligaments, minerals, moveable joints, movement, muscles, opposing pairs, pelvis, protection, shoulder blades (scapula), skeletal and muscular systems, radius, relax, ribs, skeletons, skull, sliding joints, spinal cord, sternum, support, thigh bone (femur), tibia, toe, ulna, veins, vertebrates, vitamins, voluntary muscles, wrist.</p> <p>Rocks: absorbent/not absorbent, appearance, compress, crystalline, crystals, erosion, fossils, fossilisation, grains, hard/soft, layers (strata), molten magma, metamorphic, organic matter, particles, permeability, permeable, physical properties, rough/smooth, sedimentary, shiny/dull, soils.</p> <p>Light: absence, absorb, artificial, blocked, bright, candle, dark, dim, emit, lamp, light beam, light sources, light spectrum, moon, natural, opaque, rays, reflect, reflection, see, speed of light, straight lines, surface, sunlight, travel, torch, translucent, transparent.</p> <p>Forces and Magnets: air resistance, attract, compress, direction of force, faster, floating, flying, force meter, forces, friction, gravity, magnetic, magnetic field, magnetic forces, Newton meter, Newtons (N), non-magnetic, north pole, poles, pull, push, repel, sinking, sliding, slower, south pole, speed, streamlined, stretch, twist, water resistance.</p>
<p>Year 4</p>	<p>Working Scientifically: accurate measurements, bar charts, careful observation, changes, classify, comparative test, conclusion, construct, data, data logger, differences, drawings, equipment, evidence, fair test, gather, improve, interpret, keys, labelled diagrams, oral explanations, predictions, present, record, relevant questions, research, scientific enquiry, secondary sources, similarities, systematic, tables, thermometer, written</p>

	<p>explanations.</p> <p>Living things and their habitats (as for Year 2, plus): classification keys, differences, ecologically planned parks, ferns, garden ponds, human impact on the environment (population, development, deforestation, pollution), invertebrates (snails and slugs, worms, spiders, insects), mosses, nature reserves, organism, plant groups (trees, grasses, flowering plants, non-flowering plants), similarities, variation characteristics, vertebrates (fish, amphibians, reptiles, birds, mammals).</p> <p>Animals, including humans (as for previous years, plus): absorption of food into blood stream, canines, cavities, chemical breakdown by enzymes, chewing, churning in stomach, cutting, dentine, digestion, digestive system, enamel, enzymes, faeces, fluoride toothpaste, gastric juice, grinding, gums, incisors, large intestine, molars, nerves, oesophagus, plaque, premolars, pulp cavity, predators, prey, producers, reabsorption of water from waste, ripping, saliva, slicing, small intestine, stomach acid, swallowing, tearing, tooth decay, transports.</p> <p>States of matter: boiling, changing state, condensation, cooled, degrees Celsius (°C), energy transfer solid, evaporation, fixed shape and volume, forces of attraction, freezing, gaseous, heated, liquid, melting, particles, rate of evaporation, residue, solid, solidify, temperature, thermometer, vibrate, water cycle, water vapour.</p> <p>Sound: echo, faint, frequency of vibration, medium, pitch (higher, lower), reflection of sound, sound insulation, sound wave, tuning fork, vacuum, vibration, volume (louder, softer).</p> <p>Electricity: battery, bulbs, buzzers, cell, closed circuit, conductor, crocodile clips, electrical appliances, electrical circuit, insulator, motors, open circuit, simple series circuit, switches, wires.</p>
Year 5	<p>Working Scientifically: accuracy, argument, bar graphs, casual relationship, classification keys, classify, comparative test, conclusions, degree of trust, describe, evidence, explanations, fair test, identify, labels, line graphs, measurements, oral explanation, patterns, plan, precision, predictions, presentations, quantitative measurements, refute ideas, repeat readings, report data, report and present, scatter graphs, scientific diagrams, support, systematic, tables, variables, written display.</p> <p>Living things and their habitats and Animals, including humans (as for previous years, plus): anther, asexual reproduction animal behaviourist, birth, bud, carpel, chromosomes, cross-pollination, death, egg cell (ovum), embryo, fallopian tubes, female gamete, fertilization, filament, gestation, growth, hormones, human development, life cycles, male gamete, menstrual cycle, microorganisms, naturalist, ovaries, ovary, ovulation, penis, petals, placenta, puberty, sepals, sexual reproduction, sperm, stamens, stigma, style, testes, uterus, vagina, vertebrates (reptiles, fish, amphibians, birds, mammals).</p> <p>Properties and changes of materials: buoyancy, burning, change of state, chemical changes, chemical reaction, density, dissolving, elasticity, electrical conductivity, evaporating, filtering, filtrate, gas, hardness, irreversible or hard-to-reverse change, liquid, melting, magnetism, polymer, residue, reversible change, rusting (oxidisation), sieving, solid, solubility, solute, solution, solvent, stiffness, strength, suspension, thermal conductivity, toughness</p> <p>Earth and space: asteroids, astronomer, axis, celestial body, comets, dwarf planet, Earth, Earth's rotation, eclipse, elliptical orbit, gravitational force, heliocentric model of the solar system, galaxy, geocentric model, hemisphere, Jupiter, light year, Mars, Mercury, meteors, moon, movement, Neptune, orbit, phases of the moon, planets, rotate, satellite, Saturn, shadow clock, shooting stars, solar, spherical, star, sun, sundial, time zones, Uranus, universe, Venus.</p> <p>Forces (as for Year 3, plus): accelerate, decelerate, drag forces, gears, levers, mechanism, pulleys, springs, theory of gravitation, transference of force and motion.</p>
Year 6	<p>Working Scientifically: accuracy, argument, bar graphs, casual relationship, classification keys, classify, comparative test, conclusions, degree of trust, describe, evidence, explanations, fair test, identify, labels, line graphs, measurements, oral explanation, patterns, plan, precision, predictions, presentations, quantitative measurements, refute ideas, repeat readings, report data, report and present, scatter graphs, scientific diagrams, support, systematic, tables, variables, written display.</p> <p>Living things and their habitats (as for previous years, plus): classification, classification keys, dichotomous/binary keys, five kingdoms (bacteria, protozoa, animals,</p>

plants, fungi), genetic variation, invertebrates, vertebrates (reptiles, fish, amphibians, birds, mammals)

Animals, including humans (as for previous years plus): adrenaline, aerobic respiration, alveoli, aorta, arteries, atrium, blood, blood vessels, bronchi, bronchioles, capillaries, carotid artery, circulatory system, clotting, deoxygenated, diaphragm, gills, haemoglobin, heart, heart rate, intercostal muscles, lungs, oxygenated, plasma, platelets, pulmonary artery, pulmonary vein, pulse, red blood cells, veins, ventricles, white blood cells, wind pipe (trachea)

Evolution and inheritance: adaptation, chromosomes, competition, DNA, environmental conditions, environmental variations, evolution, evolutionary change, features, fossil records, genes, genetic variation, inheritance, natural selection, palaeontologist, survival of the fittest, variation over time

Light (as for Year 3, plus): absorption, filters, lenses, light source, optics, periscope, prism, rainbow, reflection, refraction, spectrum, transmission

Electricity (as for Year 4, plus): circuits, circuit diagrams, components, recognised symbols, series circuit, voltage