

# Glenmere Community Primary School

## Science vocabulary Progression

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>EYFS</b>	<p style="text-align: center;"><b><u>Our changing world (Local environment)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Seasons:</b> spring, summer, autumn, winter, seasonal change.</li> <li>• <b>Day length:</b> night, day, daylight.</li> </ul>	<p style="text-align: center;"><b><u>Objects and Materials (Chemistry)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Names of materials:</b> wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.</li> </ul>	<p style="text-align: center;"><b><u>Light, space, electricity and movement (physics)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Changing shape:</b> squash, bend, twist, stretch.</li> <li>• <b>Light and seeing:</b> dark, light, shadow,</li> <li>• <b>Light sources:</b> e.g. candle, torch, fire, lantern, lightning.</li> <li>• <b>Electricity: safety, plugs, danger, light, switch</b></li> <li>• <b>Solar system:</b> star, planet, sun, moon, shadow, day, night.</li> </ul>	<p style="text-align: center;"><b><u>Animals and Plants (Biology)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Name some common types of plant</b> e.g. sunflower, daffodil.</li> <li>• <b>Human and animal body parts:</b> e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.</li> <li>• <b>Names of habitats and microhabitats:</b> e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.</li> </ul>		
<b>Year 1</b>	<p style="text-align: center;"><b><u>Seasons</u></b></p> <ul style="list-style-type: none"> <li>• <b>Seasons:</b> spring, summer, autumn, winter, seasonal change.</li> <li>• <b>Weather:</b> e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.</li> <li>• <b>Measuring weather:</b> temperature, rainfall, wind direction, thermometer, rain gauge.</li> <li>• <b>Day length:</b> night, day, daylight.</li> </ul>	<p style="text-align: center;"><b><u>Plants</u></b></p> <ul style="list-style-type: none"> <li>• <b>Names of common plants:</b> wild plant, garden plant, evergreen tree, deciduous tree, common flowering plant, weed, grass.</li> <li>• <b>Name some features of plants:</b> e.g. flower, vegetable, fruit, berry, leaf/leaves, blossom, petal, stem, trunk, branch, root, seed, bulb, soil.</li> <li>• <b>Name some common types of plant</b> e.g. sunflower, daffodil.</li> </ul>	<p style="text-align: center;"><b><u>Materials</u></b></p> <ul style="list-style-type: none"> <li>• <b>Names of materials:</b> wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.</li> <li>• <b>Properties of materials:</b> hard, soft, shiny, dull, stretchy, rough, smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof, absorbent, not absorbent, sharp, stiff.</li> <li>• <b>Other: object.</b></li> </ul>	<p style="text-align: center;"><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>• <b>Living or dead:</b> living, dead, never living, not living, alive, never been alive, healthy.</li> <li>• <b>Names of habitats and microhabitats:</b> e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.</li> </ul>	<p style="text-align: center;"><b><u>Animals including humans</u></b></p> <ul style="list-style-type: none"> <li>• <b>Names of animal groups:</b> fish, amphibians, reptiles, birds, mammals.</li> <li>• <b>Animal diets:</b> carnivore, herbivore, omnivore.</li> <li>• <b>Human and animal body parts:</b> e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.</li> <li>• <b>Human senses:</b> sight, hearing, touch, smell, taste.</li> <li>• <b>Exploring senses:</b> loud, quiet, soft, rough.</li> <li>• <b>Other:</b> human, animal, pet.</li> </ul>	
<b>Year 2</b>	<p style="text-align: center;"><b><u>Materials</u></b></p> <ul style="list-style-type: none"> <li>• <b>Changing shape:</b> squash, bend, twist, stretch.</li> </ul>	<p style="text-align: center;"><b><u>Working scientifically with scientists</u></b></p> <p style="text-align: center;"><b>Vocabulary will depend on scientists chosen to study.</b></p> <p style="text-align: center;"><b>Scientists could include</b></p>	<p style="text-align: center;"><b><u>Materials 2</u></b></p> <ul style="list-style-type: none"> <li>• <b>Changing shape:</b> squash, bend, twist, stretch.</li> </ul>	<p style="text-align: center;"><b><u>Plants</u></b></p> <ul style="list-style-type: none"> <li>• <b>Growth of plants:</b> germination, shoot, seed dispersal, grow, food store,</li> </ul>	<p style="text-align: center;"><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>• <b>Living or dead:</b> living, dead, never living, not living, alive, never been alive, healthy.</li> </ul>	<p style="text-align: center;"><b><u>Animals including humans</u></b></p> <ul style="list-style-type: none"> <li>• <b>Being born and growing:</b> Young, offspring, live</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Properties of materials:</b> e.g. strong, flexible, light, hard-wearing, elastic.</li> <li>• <b>Other:</b> <b>suitability</b>, recycle, pollution.</li> </ul>	<p><b>Living Things and their Habitats:</b> Rachel Carson.</p> <p><b>Materials:</b> John Loudon McAdam Julie Brusaw</p> <p><b>Plants:</b> Tim Smit Nicholas Grimshaw Jane Colden David Douglas.</p> <p><b>Animals including Humans:</b> Elizabeth Garrett Anderson. Dr Ernest Madu Louis Pasteur</p> <p><b>Animals including Humans:</b> Joseph Lister . Florence Nightingale</p>	<ul style="list-style-type: none"> <li>• <b>Properties of materials:</b> e.g. strong, flexible, light, hard-wearing, elastic.</li> <li>• <b>Other:</b> <b>suitability</b>, recycle, pollution.</li> </ul>	<p>life cycle, die, wilt, seedling, sapling.</p> <ul style="list-style-type: none"> <li>• <b>Needs of plants:</b> <b>sunlight, nutrition</b>, light, healthy, space, air.</li> <li>• <b>Name different types of plant:</b> e.g. bean plant, cactus.</li> <li>• <b>Names of different habitats:</b> e.g. rainforest, desert.</li> </ul> <p>Previously introduced vocabulary: <b>water, temperature</b>, warm, hot, cold, habitat.</p>	<ul style="list-style-type: none"> <li>• <b>Habitats including microhabitats:</b> <b>depend</b>, shelter, safety, <b>survive</b>, suited, space, minibeast, air.</li> <li>• <b>Life processes:</b> movement, sensitivity, growth, reproduction, nutrition, excretion, respiration.</li> <li>• <b>Food chains:</b> <b>food sources</b>, food, producer, consumer, predator, prey.</li> <li>• <b>Names of habitats and microhabitats:</b> e.g. under leaves, woodland, rainforest, sea shore, ocean, urban, local habitat.</li> </ul> <p>Previously introduced vocabulary: senses, <b>carnivore, herbivore, omnivore, seed, water</b>, names of materials.</p>	<p><b>young, grow, develop</b>, change, hatch, lay, fly, crawl, talk.</p> <ul style="list-style-type: none"> <li>• <b>Young and adult names:</b> e.g. lamb and sheep, kitten and cat, duckling and duck.</li> <li>• <b>Life cycle stages:</b> e.g. baby, toddler, child, teenager, <b>adult</b>; frogspawn, tadpole, froglet, frog.</li> <li>• <b>Survival and staying healthy:</b> basic needs, survive, food, air, <b>exercise, diet, nutrition</b>, healthy, balanced diet, <b>hygiene, germs</b>.</li> <li>• <b>Food groups:</b> fruit and vegetables, proteins, dairy and alternatives, carbohydrates, oil and spreads, fat, salt, sugar.</li> </ul> <p>Previously introduced vocabulary: <b>water</b>.</p>
<p><b>Year 3</b></p>	<p><b><u>Rocks and soils</u></b></p> <ul style="list-style-type: none"> <li>• <b>Types of rock:</b> <b>sedimentary rock, igneous rock, metamorphic rock</b>.</li> <li>• <b>Properties of rocks:</b> <b>permeable</b>, semi-permeable, <b>impermeable</b>, durable.</li> <li>• <b>Names of rocks:</b> e.g. marble, chalk, granite, sandstone, slate.</li> <li>• <b>Formation of rocks and fossils:</b> natural, human-made, <b>magma, lava</b>, molten rock, <b>sediment, erosion, fossilisation</b>, layers, bone, fossil.</li> <li>• <b>Soil:</b> sandy, chalky, clay, peaty, loamy, topsoil, subsoil, bedrock, mineral, organic matter, compost.</li> <li>• <b>Other:</b> <b>palaeontology</b>.</li> </ul> <p>Previously introduced vocabulary: soil, <b>water</b>, air.</p>	<p><b><u>Magnets and forces</u></b></p> <ul style="list-style-type: none"> <li>• <b>How things move:</b> move, movement, <b>surface</b>, distance, strength.</li> <li>• <b>Types of forces:</b> push, pull, contact force, non-contact force, <b>friction</b>.</li> <li>• <b>Magnets:</b> <b>magnetic, magnetic field</b>, magnetic force, bar magnet, horseshoe magnet, ring magnet, magnetic <b>poles</b> (north pole, south pole), <b>attract, repel</b>, compass.</li> <li>• <b>Magnetic and non-magnetic materials:</b> e.g. iron, nickel, cobalt.</li> </ul> <p>Previously introduced vocabulary: metal, names of materials.</p>	<p><b><u>Light</u></b></p> <ul style="list-style-type: none"> <li>• <b>Light and seeing:</b> <b>dark</b>, absence of light, <b>light source</b>, illuminate, visible, <b>shadow, translucent</b>, energy, block.</li> <li>• <b>Light sources:</b> e.g. candle, torch, fire, lantern, lightning.</li> <li>• <b>Reflective light:</b> <b>reflect, reflection</b>, surface, <b>ray</b>, scatter, reverse, beam, angle, mirror, moon.</li> <li>• <b>Sun safety:</b> dangerous, glare, damage, UV light, UV rating, sunglasses, direct.</li> </ul> <p>Previously introduced vocabulary: <b>opaque, transparent</b>, sunlight, sun.</p>	<p><b><u>Plants</u></b></p> <ul style="list-style-type: none"> <li>• <b>Water transportation:</b> transport, <b>evaporation, evaporate, nutrients</b>, absorb, anchor.</li> <li>• <b>Life cycle of flowering plants:</b> <b>pollination</b> (insect/wind), pollen, nectar, pollinator, seed formation, <b>seed dispersal</b> (animal/wind/water), reproduce, <b>fertilisation</b>, fertilise, <b>stamen</b>, anther, filament, <b>carpel (pistil)</b>, stigma, style, ovary, ovule, <b>sepal</b>, carbon dioxide.</li> </ul> <p>Previously introduced vocabulary: life cycle.</p>	<p><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>• <b>Living things:</b> <b>organisms, specimen</b>, species.</li> <li>• <b>Grouping living things:</b> <b>classification</b>, classification keys, classify, <b>characteristics</b>.</li> <li>• <b>Names of invertebrate animals:</b> snails and slugs, worms, spiders, insects.</li> <li>• <b>Invertebrate body parts:</b> e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.</li> <li>• <b>Environmental changes:</b> <b>environment</b>, environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, <b>endangered species, extinct</b>.</li> </ul> <p>Previously introduced vocabulary: carbon dioxide, <b>fish, bird, mammal, amphibian, reptile, skeleton, bone, vertebrate</b>,</p>	<p><b><u>Animals including humans</u></b></p> <ul style="list-style-type: none"> <li>• <b>Food groups and nutrients:</b> fibre, fats (<b>saturated and unsaturated</b>), vitamins, minerals.</li> <li>• <b>Skeletons and muscles:</b> skeleton, <b>muscles, tendons, joints</b>, protection, support, organs, voluntary muscles, involuntary muscles, biceps, triceps, contract, relax, bone, cartilage, shell, <b>vertebrate, invertebrate</b>, endoskeleton, exoskeleton, hydrostatic skeleton.</li> <li>• <b>Names of human bones:</b> e.g. skull, spine, backbone, vertebral column, ribcage, pelvis, clavicle, scapula, humerus, ulna, pelvis, radius, femur, tibia, fibula.</li> <li>• <b>Other:</b> <b>energy</b>.</li> </ul>

				<p><b>invertebrate</b>, backbone, names for animal body parts, names of common plants, photosynthesis.</p>	<p>Previously introduced vocabulary: movement.</p>
Year 4	<p><b><u>Electricity</u></b></p> <ul style="list-style-type: none"> <li>• <b>Electricity</b>: mains-powered, battery-powered, <b>mains electricity</b>, plug, <b>appliances</b>, devices.</li> <li>• <b>Circuits</b>: <b>circuit</b>, simple series circuit, complete circuit, incomplete circuit.</li> <li>• <b>Circuit parts</b>: bulb, cell, wire, buzzer, switch, motor, <b>battery</b>.</li> <li>• <b>Materials</b>: <b>electrical conductor</b>, <b>electrical insulator</b>.</li> <li>• <b>Other</b>: safety.</li> </ul> <p>Previously introduced vocabulary: names of materials.</p>	<p><b><u>Sound</u></b></p> <ul style="list-style-type: none"> <li>• <b>Parts of the ear</b>: <b>eardrum</b>.</li> <li>• <b>Making sound</b>: <b>vibration</b>, vocal cords, <b>particles</b>.</li> <li>• <b>Measuring sound</b>: <b>pitch</b>, <b>volume</b>, <b>amplitude</b>, <b>sound wave</b>, quiet, loud, high, low, travel, <b>distance</b>.</li> <li>• <b>Other</b>: <b>soundproof</b>, <b>absorb sound</b>.</li> </ul>	<p><b><u>States of Matter</u></b></p> <ul style="list-style-type: none"> <li>• <b>States of matter</b>: <b>solids</b>, <b>liquids</b>, <b>gases</b>, particles.</li> <li>• <b>State change</b>: <b>evaporate</b>, <b>condense</b>, <b>melt</b>, <b>freeze</b>, heat, cool, melting point, freezing point, boiling point, <b>water vapour</b>.</li> <li>• <b>Water cycle</b>: <b>precipitation</b>, evaporation, condensation, ground run-off, collection, underground water, bodies of water (sea, river, stream), water droplets, hail.</li> <li>• <b>Other</b>: atmosphere.</li> </ul> <p>Previously introduced vocabulary: temperature, rain, cloud, snow, wind, sun, hot, cold, absorb, carbon dioxide.</p>	<p><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>• <b>Living things</b>: <b>organisms</b>, <b>specimen</b>, species.</li> <li>• <b>Grouping living things</b>: <b>classification</b>, classification keys, classify, <b>characteristics</b>.</li> <li>• <b>Names of invertebrate animals</b>: snails and slugs, worms, spiders, insects.</li> <li>• <b>Invertebrate body parts</b>: e.g. wing case, abdomen, thorax, antenna, segments, mandible, proboscis, prolegs.</li> <li>• <b>Environmental changes</b>: <b>environment</b>, environmental dangers, adapt, natural changes, climate change, deforestation, pollution, urbanisation, invasive species, <b>endangered species</b>, <b>extinct</b>.</li> </ul> <p>Previously introduced vocabulary: carbon dioxide, <b>fish</b>, <b>bird</b>, <b>mammal</b>, <b>amphibian</b>, <b>reptile</b>, skeleton, bone, <b>vertebrate</b>, <b>invertebrate</b>, backbone, names for animal body parts, names of common plants, photosynthesis.</p>	<p><b><u>Animals including humans</u></b></p> <ul style="list-style-type: none"> <li>• <b>Digestive system</b>: <b>digest</b>, digestion, tongue, teeth, saliva, salivary glands, <b>oesophagus</b>, <b>stomach</b>, liver, pancreas, gall bladder, <b>small intestine</b>, duodenum, <b>large intestine</b>, <b>rectum</b>, anus, faeces, organ.</li> <li>• <b>Types of teeth and dental care</b>: <b>molar</b>, <b>premolar</b>, <b>incisor</b>, <b>canine</b>, wisdom teeth, tooth decay, plaque, enamel, baby (milk) teeth.</li> <li>• <b>Food chains and animal diets</b>: decomposer, food web.</li> </ul> <p>Previously introduced vocabulary: <b>producer</b>, consumer, <b>prey</b>, <b>predator</b>, excretion, habitat.</p>
	Year 5	<p><b><u>Forces</u></b></p> <ul style="list-style-type: none"> <li>• <b>Types of forces</b>: <b>air resistance</b>, <b>water resistance</b>, <b>buoyancy</b>, <b>upthrust</b>, Earth's <b>gravitational pull</b>, <b>gravity</b>, opposing forces, driving force.</li> <li>• <b>Mechanisms</b>: levers, pulleys, gears/cogs.</li> <li>• <b>Measurements</b>: <b>weight</b>, <b>mass</b>, kilograms (kg),</li> </ul>	<p><b><u>Earth and Space</u></b></p> <ul style="list-style-type: none"> <li>• <b>Solar system</b>: <b>star</b>, <b>planet</b>.</li> <li>• <b>Names of planets</b>: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus.</li> <li>• <b>Shape</b>: <b>spherical bodies</b>, <b>sphere</b>.</li> <li>• <b>Movement</b>: <b>rotate</b>, <b>axis</b>, <b>orbit</b>, <b>satellite</b>.</li> <li>• <b>Theories</b>: <b>geocentric model</b>, <b>heliocentric model</b>, <b>astronomer</b>.</li> </ul>	<p><b><u>Properties of materials</u></b></p> <ul style="list-style-type: none"> <li>• <b>Properties of materials</b>: thermal <b>conductor/insulator</b>, magnetism, electrical resistance, <b>transparency</b>.</li> <li>• <b>Mixtures and solutions</b>: dissolving, substance, soluble, insoluble.</li> <li>• <b>Changes of materials</b>: reversible change, physical change, irreversible change, chemical change, burning, new material, product.</li> <li>• <b>Separating</b>: sieving, filtering, magnetic attraction.</li> </ul> <p>Previously introduced vocabulary: electrical <b>conductor/insulator</b>, bulb, <b>translucent</b>.</p>	<p><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>• <b>Reproduction</b>: <b>asexual reproduction</b>, <b>sexual reproduction</b>, <b>gestation</b>, <b>metamorphosis</b>, gametes, tuber, runners/side branches, plantlet, cuttings, embryo, adolescent, penis, vagina, egg, pregnancy, gestation.</li> </ul> <p>Previously introduced vocabulary: <b>life cycle</b>, <b>pollination</b>, offspring,</p>

	<p>Newtons (N), scales, speed, fast, slow.</p> <ul style="list-style-type: none"> <li>• <u>Other</u>: <b>streamlined</b>, Earth.</li> </ul> <p>Previously introduced vocabulary: air, heat, moon.</p>	<ul style="list-style-type: none"> <li>• <u>Day length</u>: sunrise, sunset, midday, time zone.</li> </ul> <p>Previously introduced vocabulary: <b>Sun, moon, shadow</b>, day, night, heat, <b>light, reflect</b>.</p>		<p><b>fertilise</b>, fertilisation, sepal, filament, anther, stamen, pollen, petal, stigma, style, ovary, carpel, ovule, stem, bulb, roots, mammal, adult, baby, sperm, cells, live young.</p>	<p><b>expectancy</b>, old age, hormones, sweat.</p> <ul style="list-style-type: none"> <li>• <u>Changing body parts</u>: e.g. breasts, penis, larynx, ovaries, genitalia, pubic hair.</li> </ul> <p>Previously introduced vocabulary: reproduction, <b>reproduce</b>, types of animals and animal groups, <b>fertilisation</b>.</p>
<p><b>Year 6</b></p>	<p style="text-align: center;"><b><u>Electricity</u></b></p> <ul style="list-style-type: none"> <li>• <u>Flow and measure of electricity</u>: <b>voltage, amps, resistance, electrons</b>, volts (V), <b>current</b>.</li> <li>• <u>Circuits</u>: <b>symbol</b>, circuit diagram, component, function, filament.</li> <li>• <u>Variations</u>: dimmer, brighter, louder, quieter.</li> <li>• <u>Types of electricity</u>: natural electricity, human-made electricity, solar panels, power station.</li> <li>• <u>Other</u>: positive, negative.</li> </ul>	<p style="text-align: center;"><b><u>Light</u></b></p> <ul style="list-style-type: none"> <li>• <u>Reflection</u>: periscope.</li> <li>• <u>Seeing light</u>: <b>visible spectrum, prism</b>.</li> <li>• <u>How light travels</u>: light waves, wavelength, straight line, <b>refraction</b>.</li> </ul> <p>Previously introduced vocabulary: names and properties of materials, absorb.</p>	<p style="text-align: center;"><b><u>Evolution and Inheritance</u></b></p> <ul style="list-style-type: none"> <li>• <b><u>Evolution and inheritance</u></b>: evolve, <b>adaptation</b>, inherit, <b>natural selection, adaptive traits, inherited traits</b>, mutations, theory of evolution, ancestors, biological parent, chromosomes, genes, Charles Darwin.</li> <li>• <u>Other</u>: selective breeding, artificial selection, breed, cross breeding, genetically modified food, cloning, DNA.</li> </ul> <p>Previously introduced vocabulary: classification, <b>offspring, characteristics, habitat, environment</b>, adapt, <b>variations</b>, human, <b>fossil</b>, suited, cells, names of different habitats, names of animals and their body parts, species, <b>sedimentary rock</b>, lava, <b>igneous rock, metamorphic rock, magma</b>, heat, <b>fossilisation</b>.</p>	<p style="text-align: center;"><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>• <u>Classifying</u>: Carl Linnaeus, Linnaean system, flowering and non-flowering plants, variation.</li> <li>• <b><u>Microorganisms</u></b>: <b>bacteria</b>, single-celled, microbes, microscopic, virus, fungi, fungus, mould, antibiotic, yeast, ferment, <b>microscope</b>, decompose.</li> </ul>	<p style="text-align: center;"><b><u>Animals including humans</u></b></p> <ul style="list-style-type: none"> <li>• <b><u>Circulatory system</u></b>: circulation, <b>heart</b>, pulse, heartbeat, heart rate, lungs, breathing, <b>blood vessels</b>, blood, pump, transported, <b>oxygenated blood, deoxygenated blood</b>, oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells.</li> <li>• <u>Lifestyle</u>: <b>drug, alcohol</b>, smoking, disease, calorie, energy input, energy output.</li> <li>• <u>Other</u>: water transportation, nutrient transportation, waste products.</li> </ul> <p>Previously introduced vocabulary: carbon dioxide.</p>

## Progression of Vocabulary - Working Scientifically

KS1	LKS2	UKS2
aim answers block diagrams changes compare describe difference different enquiry equipment experience explore findings gather group identify (name) investigate measure notice observe patterns pictograms questions record same similarity simple tables sort sorting diagrams tally charts test What will we do? (plan) What do you think will happen? (prediction) What happened? (results) What have we found out? (conclusion)	accurate bar chart chart classify comparative test conclusion (What have we found out?) criteria data develop diagram evaluate evidence explanation key making a test fair method observations plan (What will we do?) practical enquiry prediction (What do you think will happen?) primary sources questioning reasoning relationships results (What happened?) secondary sources standard units table What do we change, what do we keep the same, what are we measuring?	accuracy and precision bar graphs causal relationship degree of trust dependent variable independent variable justify line graphs refute repeat results scatter graphs support variables (what do we change, what do we keep the same, how and what are we measuring?)