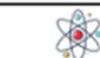


Year 7 Science Curriculum Plan



Scientific attitudes



Analysis & investigation



Experimental skills & investigations



Measurements

Autumn

Lab Safety and Skills for Science



Investigative Skills; hazard symbols; lab safety; solids, liquids and gases; particle model.

Key terms: solid, liquid, gas, corrosive, flammable, irritant, hazardous, variables, investigation

Changes of state



Melting; freezing; evaporating; boiling; condensing.

Key terms: solid, liquid, gas, melting, freezing, evaporating, boiling, condensing, conservation of mass.

Energy transfers and resources



Sankey diagrams; efficiency; energy stores; energy resources; making batteries.

Key terms: energy, transfer, store, pathway, kinetic, thermal, chemical, elastic, electrical, gravitational, nuclear, light, sound, magnetic, efficiency, useful, wasted.

Cells and organisation



Adaptations; plant cells; animal cells; cell structure; microscope skills; scientific drawing; plant and animal organisation.

Key terms: nucleus, membrane, respiration, specialised, chloroplast, mitochondria, organ system, adaptations, epithelial.

Separation techniques



Chromatography; distillation; filtration; solubility; pure substances.

Key terms: soluble, insoluble, evaporation, condensation, distillation, chromatography, crystallisation, filtration.

Spring

Reproduction



Human reproduction; menstrual cycle; gestation; birth; plant reproduction; pollination; flower dissection; seed investigation.

Key terms: asexual, sexual, ovule, pollen, gamete, zygote, embryo, enzyme, acrosome, pollination, anther, stigma, conservation, competition.

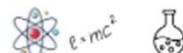
Forces



Gravity; air resistance; speed; friction; density; forces.

Key terms: force, newtons, independent variable, dependent variable, control variable, hypothesis, prediction, correlation, directly proportional.

Periodic table and elements



Elements; groups; properties; compounds; mixtures; chemical reactions.

Key terms: group, period, element, atom, molecule, compound, exothermic, endothermic, precipitation, oxidation, reduction, thermal decomposition, combustion, neutralisation.

Summer

Genetics and evolution



DNA; chromosomes; genes.

Nature reserve visit

Variation; heredity; observation skills.

Key terms: DNA, chromosome, nucleus, gene expression, characteristic, protein, genetic factor, environmental factor, twins, ancestor, parent, offspring.

Heat transfers



Solids, liquids and gases; convection; conduction; particle model.

Key terms: solid, liquid, gas, particles, heat, thermal, temperature, conductor, insulator, convection, radiation.

Space



Planets; stars; galaxies

Key terms: planet, star, orbit, satellite, galaxy, universe, moon.

Conservation



Wildlife; environment; species.

Solubility project



Variables; solubility; presentation skills; method writing.

Extra reading: Horrible Science Titles (Microscope Monsters; Dangerous Diseases; Nasty Nature, Chemical Chaos, The Smashing Solar System, Fatal Forces); Cellfies; The Periodic Table, A Visual Guide to the Elements; The Extraordinary Life of Katherine Johnson; Unlocking the Universe.