

Year 7 Science Curriculum 2016/17

Term	Skills Focus	Content
Autumn 1 (Biology – Cells & Reproduction)	<p>Practical skills: Using microscopes, preparing slides</p> <p>Numeracy skills: Calculating total magnification of a microscope and graph drawing.</p> <p>Literacy: Spelling, grammar, punctuation and formatting.</p>	Safety in the laboratory, animal & plant cells, unicellular & multicellular organisms, male & female reproductive systems, menstrual cycle, fertilisation in animals and plants, seed dispersal and germination.
Autumn 2 (Chemistry – Physical Changes)	<p>Practical skills: Using lab equipment</p> <p>Numeracy skills: Graph drawing</p> <p>Literacy: Using scientific language</p> <p>Investigative skills: Evaluating methods</p>	Solids, liquids & gases, Brownian Motion, evaporation, density, pressure, dissolving, filtration, distillation and chromatography.
Spring 1 (Physics – Forces & Motion)	<p>Practical skills: Taking measurements correctly</p> <p>Numeracy skills: Graph drawing</p> <p>Literacy: Using scientific language</p> <p>Investigative skills: Analysing results</p>	Forces, Hooke's Law, friction, balanced and unbalanced forces, speed, distance time graphs, moments, gravity, solar system, seasons, weather, space travel.
Spring 2 (Chemistry – Chemical Changes)	<p>Practical skills: Following method instructions</p> <p>Numeracy skills: Graph drawing</p> <p>Literacy: Using connectives</p> <p>Investigative skills: Writing conclusions</p>	Chemical changes, acids & alkalis, hazard symbols, neutralisation, acids & metals, acids & carbonates, acid rain.
Summer 1 (Physics – Magnetism & Electricity)	<p>Practical skills: Risk assessments</p> <p>Numeracy skills: Calculations, symbols and Units</p> <p>Literacy: Research and referencing skills</p> <p>Investigative skills: Planning investigations</p>	History of magnets, magnet strength, electromagnets, electrical current, voltage, resistance, circuits, motors, static charge.
Summer 2 (Biology – Plants & Ecosystems)	<p>Practical skills: Using lab equipment</p> <p>Numeracy skills: Reading and interpreting graphs</p> <p>Literacy: Spelling</p> <p>Investigative skills: Planning investigations</p>	Photosynthesis, leaves, water & minerals, ecosystems, food chains & webs, interdependence, competition in animals and plants.

Year 8 Science Curriculum 2016/17

Term	Skills Focus	Content
Autumn 1 (Physics – Energy & Waves)	<p>Practical skills: Using lab equipment</p> <p>Numeracy skills: Graph drawing</p> <p>Literacy: Spelling, grammar, punctuation and formatting.</p> <p>Investigative skills: Analysing data & writing conclusions</p>	Energy transfers, potential and kinetic energy, conduction & convection, fuels, waves, light & sound, the human eye, the human ear.
Autumn 2 (Biology – Keeping The Body Moving)	<p>Practical skills: Lab techniques</p> <p>Numeracy skills: Using the correct symbols and Units</p> <p>Literacy: Research and referencing</p> <p>Investigative skills: Planning an investigation</p>	Healthy diets, obesity, deficiency diseases, digestive system, breathing & gas exchange, respiration, human skeleton, muscles, drugs, smoking, alcohol and addiction.
Spring 1 (Chemistry – Chemical Reactions)	<p>Practical skills: Risk assessing</p> <p>Numeracy skills: Calculations, equations & formulae</p> <p>Literacy skills: Use of scientific language</p> <p>Investigative skills: Evaluating methods</p>	The Periodic Table, elements and atoms, compounds, balancing equations, combustion, oxidation, catalysts, polymers, ceramics, composites.
Spring 2 (Chemistry – Chemical Properties)	<p>Practical skills: Following method instructions</p> <p>Numeracy skills: Reading & analysing graph data</p> <p>Literacy skills: Spelling</p> <p>Investigative skills: Planning & Evaluating methods</p>	The Periodic Table, elements and atoms, compounds, balancing equations, combustion, oxidation, catalysts, polymers, ceramics, composites.
Summer 1 (Biology – Genetics & Variation)	<p>Practical skills: Taking measurements</p> <p>Numeracy skills: Reading & analysing graph data</p> <p>Literacy skills: Formatting</p> <p>Investigative skills: Planning investigations</p>	DNA, variation, genetic disorders, biodiversity, selective breeding, genetic engineering, cloning, survival and extinction.
Summer 2 (Chemistry – Earth & Its Materials)	<p>Practical skills: Risk assessing</p> <p>Numeracy skills: Reading and analysing graph data</p> <p>Literacy skills: Using connectives</p> <p>Investigative skills: Analysing results & writing conclusions</p>	Earths structure, atmosphere, human activity, carbon cycle, rocks and rock cycle, metals.

