Science Skills and Content Coverage for KS3:

Year 7	Term 1 (7 weeks)	Term 2 (7 weeks) 1 Assessment week	Term 3 (6 weeks)	Term 4 (6 weeks)	Term 5 (5 weeks)	Term 6 (7 weeks) 1 Assessment week
Topic	**Cells** Life processes Animal cells Microscopes Special cells Unicellular cells **Movement** Skeleton Muscles	**Particle model** States of matter SLG's properties Change of state Change state melting ice **Separation** Dissolving Filtration Chromatography Distillation	**Light** Luminous – nonluminous Reflection Refraction Eyes Camera * Colour* (may move to waves) **Sound** Sound energy Ear Loudness – pitch ultrasound	**Simple circuits** Circuit symbols Series circuits Parallel circuits Static electricity **Energy cost** Renewable energy Fossil fuels Electrical appliances Power	**Human reproduction** Puberty Sex organs Fertilisation Pregnancy Contraception Menstrual cycle fertility	**Forces 1** Forces intro Friction Balanced forces Drag – air resistance **Universe** Solar system Earth seasons Moon Night sky **Alien life**

Year 8	Term 1 (7 weeks)	Term 2 (7 weeks) 1 Assessment week	Term 3 (6 weeks)	Term 4 (6 weeks)	Term 5 (5 weeks)	Term 6 (7 weeks) 1 Assessment week
Topic	**Health -digestion** Lungs – gas exchange Smoking Alcohol Diabetes & Obesity **Digestion** Balanced diet Digestion Diet defiance's Food testing	**Force 2** Forces at a distance Gravity Elastic force Squashing & stretching **Pressure** Pressure – solids Pressure – Liquids Pressure - gases	**Atoms & elements** Atom structure Elements & symbols AECM structure Periodic table Groups periodic table **Compounds** Compounds & molecules Making compounds Naming compounds	**Interdependence** Competition Adaptation Ecosystem Food chain – web Changes to food web Pyramid numbers **Plant reproduction** flowers pollination Seed dispersal	**energy transfer** Energy in food Food labels Food investigation prac Energy types – transfers Fruit batteries **work energy** forces recap levers work done	**Magnetism** Magnets Making electromagnets Using electromagnets **Heating-cooling** Energy – temperature Conduction Convection Radiation - investigation Insulation investigation

Year 9	Term 1 (7 weeks)	Term 2 (7 weeks) 1 Assessment week	Term 3 (6 weeks)	Term 4 (6 weeks)	Term 5 (5 weeks)	Term 6 (7 weeks) 1 Assessment week
Topic	**Respiration** Animal cells Aerobic - Anaerobic exercise **Photosynthesis** Plant cell Photosynthesis basis Photosynthesis – prac **Microbes** Communicable diseases Infections disease Body's defences Testing disinfectants	**Universe** Solar system Earth seasons Moon Night sky **Alien life** **Earth resources** recycling Human impact Formation of crude oil	**Evolution** Extinction Fossils Charles Darwin Evolution Natural selection **Inheritance** Variation Continuous – discontinuous Inheritance DNA Adapting to change Selective breeding Genetic modification	**Climate** Air pollution Climate change Global warming Carbon cycle **Rocks** Structure of Earth Sedimentary rocks Igneous – metamorphic rocks Rock cycle	**Light** Luminous – nonluminous Reflection Refraction Eyes Camera * Colour* (may move to waves) **Sound** Sound energy Ear Loudness – pitch ultrasound	**Waves** Transverse longitudinal waves Sound waves – speed sound Em spectrum Em wave uses Dangers of radiation **Speed** Speed equation Distance time graphs **Project**

Science Skills and Content Coverage for KS4 / GCSE:

Year 10	Term 1 (7 weeks)	Term 2 (7 weeks) 1 Assessment week	Term 3 (6 weeks)	Term 4 (6 weeks)	Term 5 (5 weeks)	Term 6 (7 weeks) 1 Assessment week
Topic	Cell structure Transport in cells Cell Division	Principles of organisation Animal tissues, organs and organ systems	Animal tissues, organs and organ systems Plant tissues, organs and systems	Communicable diseases Plant disease (biology only)	Photosynthesis Respiration	Homeostasis The human nervous system

Year 11	Term 1 (7 weeks)	Term 2 (7 weeks) 1 Assessment week	Term 3 (6 weeks)	Term 4 (6 weeks)	Term 5 (5 weeks)	Term 6 (7 weeks) 1 Assessment week
Topic	Hormonal coordination in humans Plant hormones Reproduction	Variation and evolution Genetics and Evolution	Adaptation, Interdependence and competition Organising an ecosystem	Biodiversity and Ecosystems		