Science	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	The human body -the structure and functions of body systems. Cells , tissues organs and systems Muscles and bones	Particles and Properties of Materials Solids Liquids and gases, diffusion and air pressure. Atoms, elements and molecules.	Floating and sinking Density and Forces, friction and pressure Sound, making and moving sounds.	Current Electricity Chemical reactions and Energy. Renewable energy - the advantages and disadvantages	Sexual Reproduction in animals Interdependence Ecosystems Endangered animals	Forces Structure of the earth natural disasters
Year 8	Food and Nutrition Digestion & Transportation Plants and their reproduction	Breathing and anaerobic and aerobic respiration Finding a pulse Unicellular organisms Parts of a bacterial cell Carbon cycle	Combustion, burning and reactions Fire safety Pollution & global warming The periodic table- atoms, elements and chemical substances	Materials in the Earth Metals and their uses Properties & reactions of metals Igneous and metamorphic rocks Weathering & erosion	Properties of solids, liquids and gases Fluids -floating & sinking, pressure &drag Light The travel of light, reflection and refraction Coloured light	Energy transfer & control Earth and space Solar system and seasons Magnetic Earth and Gravity
Year 9	Cells Basic cell structure, specialised cells Genetics Nerves Inheritance, modification, evolution Disease Using microscope Measuring & drawing graphs	Prevention and medicines Drug development Health Atomic Structure Elements and compounds The periodic table	Ionic bonding Covalent bonding metallic bonding States of matter Separating and purifying substances Breaking down ionic compounds Assessing risk Investigations	Acids Hazard symbols Metals Motion Forces and their formulas Separating mixtures Measuring and testing for pH, H2 and Co2	Energy Waves Electromagnetic spectrum Atoms Radiation	Introduction to GCSE

Year 10 Science GCSE Biology	**Cell Biology** Animal, plant and bacterial cell structure Cell specialisation and division Mitosis Stem cells Active transport Diffusion and Osmosis How a microscope works Gas exchange	**Organisation** **Cell Organisation** **Structure of red and white blood cells** **The digestive system** **Enzymes** **Lungs** **Gas exchange** **The circulatory system - heart and blood vessels** **Cardiovascular disease**	**Body System and Organs** Factors affecting health Communicable and noncommunicable disease Function of white blood cells Impact of stress on health Risk factors associated with disease Cancer Plant cell organisation Transpiration Translocation	**Infection and response & Healthy Lifestyle** Healthy diet How pathogens can spread Communicable disease Viral, bacterial and Fungal disease Vaccination Drug development Antibiotic resistance	**Biorganics** **Photosynthesis reaction and rate** **Use of glucose** **Aerobic and Anerobic respiration** **Fermentation**	Repiration and exercise Lactic acid Oxygen debt Exercise Mitochondria
Year 11 Science GCSE Biology	Homeostasis The nervous system The brain, the Eye The endocrine system Menstrual cycle Contraception / Fertility	Animal hormones, plant hormones and their uses DNA and reproduction, Meiosis Genetics, chromosomes Revision	Evolution and extinction Selective breeding, genetic engineering, cloning, fossils Competition Adaptations	Food chains Environmental changes Water and carbon cycle Decay Biodiversity, global warming, deforestation Biomass, biomass transfer, biotechnology	Revision • Exam preparation •Exam technique • Question types	Revision • Exam preparation •Exam technique • Question types