



	Autumn 1			Autumn 2			Spring 1		Spring 2		Summer 1		Summer 2		
Reporting Y7		CfCs			BfL & LAL				BfL & LAL					BfL & LAL	
Year 7	C1.1 Particles, B1.1 Cells, P1.1 Forces. Students begin their science journey with an introduction to safety where they learn the importance of working carefully and how to use laboratory equipment safely. Students are given the opportunity to develop their working scientifically skills with a unit covering how scientists ask questions and plan investigations, how they record their data, analyse and evaluate it. They begin some physics by studying forces and how they affect things, how we can measure forces and how they can be balanced or unbalanced. Students next move on to chemistry with a module on particles and their behaviour. They learn how the particle model can help explain things such as the state of matter and changing state. They study cells in a biology topic that leads on to learning about different specialised cells and how they are adapted to do their jobs. ASSESSMENTS: P1.1/C1.1/B1.1 TESTS and feedback				P1.2 Sound, C1.2 Elements, C2.2 Separation techniques, B1.2 Body systems. In the physics topic on sound, students learn how sound is made, how it travels and how it can be detected. They learn about loudness and pitch as well as how the ear works. Students then move on from particles to learn about elements, atoms and compounds in chemistry. They learn about mixtures and develop their practical skills learning how to separate them using a range of separation techniques. In a biology topic about the structure and function of body systems they learn about the breathing system, the skeleton and how we move. Throughout the term they will have opportunities to develop their skills including working scientifically, literacy and numeracy. ASSESSMENTS: P1.2/C1.2/C2.2/B1.2 TESTS and feedback				P1.3 Light and P1.4 Space, C1.3 Reactions, B1.3 Reproduction. In the light topic, students investigate reflection and refraction and they find out how the eye works. In the topic on Space, students learn about the Solar System as well as what causes day and night and the seasons on Earth. They learn about the phases of the moon and how they are caused. In chemistry, students learn about chemical reactions and how to represent these with word equations. They study reactions that include burning fuels, thermal decomposition and exothermic or endothermic reactions. They study reproduction to include plants as well as animals. This includes changes that happen in adolescence and the menstrual cycle. Throughout the term they will have opportunities to develop their skills including working scientifically, literacy and numeracy. ASSESSMENTS: P1.3/P1.4/C1.3/B1.3 TESTS and feedback					Curriculum Enrichment Week	
Reporting Y8		CfCs			BfL & LAL				BfL & LAL					BfL & LAL	
Year 8	B2.2 Ecosystems, C1.4 Acids and Alkalis, P2.2 Energy. Students begin with a consolidation of safety in science lessons. They study the biology of ecosystems which includes how plants make food by photosynthesis, the minerals they need to be healthy and the structure of leaves. They learn about respiration in living organisms to release energy. They then study the inter-relationships in ecosystems including food chains and how they can be disrupted. In chemistry, students learn about acids and alkalis, how we can use indicators to identify them and neutralisation reactions. They develop their understanding of chemical reactions by writing word and symbol equations. The physics topic on energy shows how energy can be stored and transferred. This topic explains how electricity is generated including using renewable sources. They learn about energy and power, and can apply this to electrical appliances in the home. Throughout the term students will have opportunities to develop their skills including working scientifically, literacy and numeracy. ASSESSMENTS: B2.2/C1.4/P2.2 TESTS and feedback				B2.1 Health and lifestyle, P2.1 Electricity and magnetism, C2.1 The Periodic Table. Students will learn about health and the importance of diet. They learn how to test foods for particular nutrients and how the digestive system works. They learn about the effects of smoking, drugs and alcohol on health. In the electricity topic they learn about electricity in circuits and how to measure current, potential difference and resistance, as well as magnets and electromagnets. In chemistry, students study the Periodic Table and how it is arranged. They learn specifically the elements of Group 1, 7 and 0 and any patterns in the properties of these groups. Throughout the term they will have opportunities to develop their skills including working scientifically, literacy and numeracy. ASSESSMENTS: B2.1 /P2.1/C2.1 TESTS and feedback				C2.3 Metals, B2.3 Adaptations C2.4 Earth, P2.3 Motion and Pressure. In chemistry, students study some of the ways metals react before learning about other materials and their properties, including ceramics, polymers and composites. In biology they study a topic on adaptation and inheritance, learning about why organisms are different and how natural selection favours the best adapted to survive. Students learn about the Earth, it's atmosphere and it's rocks. They study sedimentary, metamorphic and igneous rocks and how they cycle from one to another. They learn more about the importance of the carbon cycle and the impact of humans on climate change. They study motion and pressure in Physics, which includes how to calculate speed and interpret motion graphs. Students learn how to work out pressure on solids, and applications of pressure in liquids and gases. Throughout the term they will have opportunities to develop their skills including working scientifically, literacy and numeracy. ASSESSMENTS: C2.3/B2.3/C2.4/P2.3 TESTS and feedback					Curriculum Enrichment Week	
Reporting Y9		CfCs			BfL & LAL				BfL & LAL					BfL & LAL	
Year 9	B5+B6, P3 : Students begin their GCSE studies learning about health and disease to include physical and mental health and how they interact. They study certain communicable diseases which may be caused by bacteria, viruses, fungi or protists and how these are spread. Then they learn about human defence responses and the immune system. Next they learn about preventing and treating disease, including how vaccines work, the difference between painkillers and antibiotics and how new drugs are discovered and developed. In physics they study the energy resources topic which begins with our energy demands then looks at renewable energy resources, how they work and the impact they can have on the environment. ASSESSMENTS: B5+B6/P3 TESTS and feedback				C1+C2, B7: Students study a topic on atomic structure; which includes electronic structures, ions and isotopes as well as the history of the atom. They learn to write chemical equations to represent reactions, including state symbols and how to balance symbol equations. They also develop their knowledge of the methods to separate mixtures including distillation and chromatography. Next they study the Periodic Table and how it was developed. They study specifically the elements in Group 1, Group 7 and Group 0 and how to explain trends in their properties. In Biology they learn about non-communicable diseases such as cancer and heart disease, and the risk factors for such diseases including smoking, drugs and alcohol, diet and lack of exercise. They carry out a biology and a chemistry required practical during this term. ASSESSMENTS: C1&C2/B7 TESTS and feedback				P11+P12, C11, B15: Students study a topic on waves and their properties. They learn about transverse and longitudinal waves and how to study waves to find their wavelength, frequency and speed. They investigate the behaviour of both light waves and sound waves before exploring the electromagnetic spectrum. They learn about the properties and uses of radio waves, microwaves, infrared radiation, ultraviolet, gamma and X rays. In chemistry they study a topic on the Earth's atmosphere. They learn about the history of our atmosphere and how it changed over time. They also learn about greenhouse gases and global climate change as well as learning about other atmospheric pollutants and their effects on both the environment and health.They carry out two different physics required practicals this term. In biology, students study a unit on ecology which allows for outside sampling. They learn about interdependence and competition in ecosystems and the physical and behavioural adaptations of plants and animals. ASSESSMENTS: P11& P12/C11/B15 TESTS and feedback					Curriculum Enrichment Week	