Year 7 Autumn Term 1 (Covid catch up plans and amendments in red)			
What are we learning?	**What knowledge, understanding and skills will we gain?**	**What does mastery look like?**	**What additional resources are available?**
Initial lesson will focus on Laboratory safety, something generally covered during Year 6 induction days. The Baseline test will be given to ensure pupils are in the correct science setting. Due to pupils beginning the course most information will be new anyway, so theory content unaffected. Practical work to be introduced ASAP and time given to develop practical work, equipment knowledge and use of Bunsen burners and chemicals etc.			
7A Cells, tissues and organs This unit covers the following statements from the UK National Curriculum for Science: • cells as the fundamental unit of living organisms, including how to observe, interpret and record cell structure using a light microscope. (Completed as a theory lesson using diagrams and videos) • the functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts • the similarities and differences between plant and animal cells	**Knowledge** **Understanding** **Skills** See left.	Lessons are a mixture of theory and practical activities designed to prepare the Students for the GSCE course, triple science for the more able students. (Lessons still planned to prepare pupils for GCSE, however practical work has been removed, will be replaced with either videos or app/internet based practical activities. Possibility that some simpler practical activities could be set as homework) Students are encouraged to have resilience and confidence in the science that they have been taught in order to be	Pearson active learn Bitesize KS3 Science Seneca Learning Various KS revision guides

• the hierarchical organisation of multicellular organisms: from cells to tissues to organs to systems to organisms. In addition to covering a variety of Working Scientifically statements, this unit has a focus on: • use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety (using a light microscope and preparing light microscope slides). Unable to complete this aspect. **7E Mixtures and separation** This unit covers the following statements from the UK National Curriculum for Science: • mixtures, including dissolving • simple techniques for separating mixtures: filtration, evaporation, evaporation, distillation and chromatography. In addition to covering a variety of Working Scientifically statements, this unit has a focus on: • use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety. Unable to complete this aspect. This unit also focuses on the aim to 'equip students with the scientific knowledge required to understand the uses and implications of science, today and for the future'.		able to apply it to unfamiliar situations. Students are challenged on the depth of their scientific understanding and vocabulary through regular oral and written questioning/testing. (Marking, testing and feedback will be modified so pupils complete a mixture online tasks that give automatic feedback, sheet based tasks as well as keeping end of topic tests that will be marked (after 72hours) and feedback given, but possibly without pupils having tests returned to save time (Tests returned after 72 hours), possibly used as homework task to correct mistakes.	

Year 8 Autumn Term 1 (Covid catch up plans and amendments in red)			
What are we learning?	**What knowledge, understanding and skills will we gain?**	**What does mastery look like?**	**What additional resources are available?**
Year 8 will be given access to all the summary sheets from year 7 topics for reference. 4 Key topic Quick quizzes to be set for the initial Thurs/Fri to recap/consolidate key ideas. The first 4 weeks of the year will cover the four missed topics from year 7 (7L, 7F, 8A and 8E).			
8I Fluids This unit covers the following statements from the UK National Curriculum for Science: • forces: associated with deforming objects; stretching and squashing – springs; with rubbing and friction between surfaces, with pushing things out of the way; resistance to motion of air and water • atmospheric pressure, decreases with increase of height as weight of air above decreases with height • pressure in liquids, increasing with depth; upthrust effects, floating and sinking • pressure measured by ratio of force over area – acting normal to any surface • conservation of material and of mass, and reversibility, in melting, freezing,	**Knowledge** **Understanding** **Skills** See left.	Lessons are a mixture of theory and practical activities designed to prepare the Students for the GSCE course, triple science for the more able students. (Lessons still planned to prepare pupils for GCSE, however practical work has been removed, will be replaced with either videos or app/internet based practical activities. Possibility that some simpler practical activities could be set as homework) Students are encouraged to have resilience and confidence in the science that they have been taught in order to be able to apply it to unfamiliar situations. Students are challenged on the depth of their scientific	Pearson active learn Bitesize KS3 Science Seneca Learning Various KS revision guides

evaporation, sublimation, condensation, dissolving • similarities and differences, including density differences, between solids, liquids and gases • the difference between chemical and physical changes • the differences in arrangements, in motion and in closeness of particles explaining changes of state, shape and density, the anomaly of ice–water transition • atoms and molecules as particles • changes with temperature in motion and spacing of particles. In addition to covering a variety of Working Scientifically statements, this unit has a focus on: • apply mathematical concepts and calculate results. **8B Plants and their reproduction** This unit covers the following statements from the UK National Curriculum for Science: • plants making carbohydrates in their leaves by photosynthesis and gaining mineral nutrients and water from the soil via their roots • reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms		understanding and vocabulary through regular oral and written questioning/testing. (Marking, testing and feedback will be modified so pupils complete a mixture online tasks that give automatic feedback, sheet based tasks as well as keeping end of topic tests that will be marked (after 72hours) and feedback given, but possibly without pupils having tests returned to save time (Tests returned after 72 hours), possibly used as homework task to correct mistakes.	

• the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops • the importance of plant reproduction through insect pollination in human food security • heredity as the process by which genetic information is transmitted from one generation to the next • differences between species • the variation between individuals within a species being continuous or discontinuous, to include measurement and graphical representation of variation • the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material. In addition to covering a variety of Working Scientifically statements, this unit has a focus on: • make and record observations and measurements using a range of methods for different investigations; and evaluate the reliability of methods and suggest possible improvements. (Can be achieved using data provided on sheets or given examples of date presentation and how reliable they are) • apply sampling techniques. (Can be achieved with dotted A4 and a paperclip)			