Year	Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Accreditations/ experiences/ opportunities
7,8,9	**Activity Area**							
	NC Targets	Clear messaging in digital media	Networks from semaphores to the Internet	Programming A – Variables in games	Data and information – Spreadsheets	Using media – Gaining support for a cause	Programming B - Sensing movement	
		Assessment period at the end of each unit to track progression and attainment						
	Suggested Activities	This unit is designed to build upon learners' experience in key stage 2. It requires learners to use a range of different skills across several pieces of software. Learners will work between different applications to create a poster and slides on a given theme. The unit is designed so that learners can concentrate on applying skills that they may have previously learnt as well as those learnt in the unit. Learners are given clear tasks for which they need to first plan and then implement	Imagine a world without computer networks: there would be no more YouTube, Google, instant messaging, online video gaming, Netflix, and iTunes; no online shopping; no file sharing; and no central backups of information. This unit begins by defining a network and addressing the benefits of networking, before covering how data is transmitted across networks using protocols.	This unit is the first programming unit of KS3. The aim of this unit and the following unit (Programming II) is to build learners' confidence and knowledge of the key programming constructs. Importantly, this unit does not assume any previous programming experience, but it does offer learners the opportunity to expand on their knowledge throughout the unit. The main programming concepts covered in this unit are sequencing,	Introduce your learners to the wonderful world of spreadsheets and the concept of cell referencing. Ask them to collect, analyse, and manipulate data, before turning it into graphs and charts. Data is beautiful!	Do you want your learners to change the world? Here's a good place to start. They will develop a deeper understanding of information technology and digital literacy by using their skills across the unit to create a blog post about a real world cause that they are passionate about and would like to gain support for.	This unit begins right where 'Programming I' left off. Learners will build on their understanding of the control structures' sequence, selection, and iteration (the big three), and develop their problem-solving skills. Learners will learn how to create their own subroutines, develop their understanding of decomposition, learn how to	

		a solution. A rubric is used to help learners focus on specific aspects of their work.		variables, selection, and count-controlled iteration. All of the examples and activities for this unit use Scratch 3.			create and use lists, and build upon their problem-solving skills by working through a larger project at the end of the unit.	
10	**Activity Area**							
	NC Targets	Media – Vector graphics	Layers of computing systems (What is a computer system)	Developing for the Web	Representations – from clay to silicon (different ways data is represented	Mobile app development (tappy tap)	Project completion	
		This unit offers learners the opportunity to design graphics using vector graphic editing software. By the end of the unit learners will have produced an illustration, a logo, or some icons using vector graphics. The lessons are tailored to Inkscape (inkscape.org), which is open source and cross-platform, but the resources should be readily adaptable to any vector graphics	This unit takes learners on a tour through the different layers of computing systems: from programs and the operating system, to the physical components that store and execute these programs, to the fundamental binary building blocks that these components consist of. The aim is to provide a concise overview of how computing systems operate, conveying the essentials and abstracting away the technical details that	In this unit, learners will explore the technologies that make up the internet and World Wide Web. Starting with an exploration of the building blocks of the World Wide Web, HTML, and CSS, learners will investigate how websites are catalogued and organised for effective retrieval using search engines. By the end of the unit, learners will have a functioning website.	Humans use symbols to record, process and transmit information. Introduce binary digits to your learners as the symbols computers use to perform these tasks and focus on the representation of text and numbers.	Today, there's an app for every possible need. With this unit you can take learners through the entire process of creating their own mobile app, using App Lab from code.org. Building on the programming concepts learners used in previous units, they will work in pairs to perform user research, design their app, write the code for it, before finally evaluating and publishing it for the world to use.	This is the final lesson of the unit and the focus will be on completing and evaluating the learners' app projects. The lesson starts with an activity to remind the learners about problem-solving and debugging, followed by a short activity to help them plan the time that they have left in the lesson to	

		editor. Vector graphics can be used to design anything from logos and icons to posters, board games, and complex illustrations. Through this unit, learners will be able to better understand the processes involved in creating such graphics and will be provided with the knowledge and tools to create their own.	might confuse or put off learners. The last lessons cover two interesting contemporary topics: artificial intelligence and open source software. These are linked back to the content of the unit, helping learners to both broaden their knowledge and focus on the topics addressed in the unit. The unit assumes no prior knowledge. There are, however, links to the 'Representations' units taught in Years 8 and 9, the Year 7 unit 'Networks from semaphores to the Internet' and Year 8 unit 'Developing for the web'.				complete their app. The learners will be given time to complete their apps before evaluating their success against their criteria and by answering a short set of questions. The last 15 minutes of the lesson will be used for the learners to take an individual assessment through a multiple-choice test.	
		Assessment period at the end of each unit to track progression and attainment						
11		IT and the world of work	Online safety	Paper 1 and paper 2 Computational logic and algorithms Computational logic and algorithms Programming techniques and data representation Programming techniques and data representation Paper 3 & 4 Programming techniques and data representation Paper 3 & 4				

		The world of work has been transformed by the use of information technologies. Learners must be able to identify how the modern structure of the workplace will impact their future lives. This unit will facilitate a deeper comprehension of the methods employed by organisations and the impact the use of IT in the working environment has on all stakeholders.	As most learners will already have some form of online presence and familiarity with online spaces, the purpose of this unit is for them to start thinking more critically about how they, and others, conduct themselves online. Learners will also be asked to discuss key debates around the online world, such as the extent of their right to privacy, and which powers should be granted to organisations and states. As much as possible, learners should be encouraged to develop their own ideas and opinions in order to become engaged citizens when it comes to online rights.	Working towards readiness for exams in the summer. Looking at gaps in their learning and helping to answer the questions to the required standard for the OCR Entry Level.