

Overview of Curriculum for ICT/Computer Science – Academic Year 2021-22

| Year Group | September | October | November | December |
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| 7 | <p>In ICT/CS lessons, year 7 will be learning how to use the school systems and will have their core knowledge of how to use different pieces of software tested using a range of skills lessons.</p> <p>The students will focus their skills on the core basics such as presentation software, word processing software, spreadsheet software and desktop publishing software.</p> <p>This will prepare them for completing tasks in the other units as well as giving a good idea of a baseline set of skills. This will also prepare students for KS4 ICT coursework as the focus of the skills lessons is also on developing products for a specific audiences and purposes.</p> | <p>Students will continue to develop and test their core skills by completing the skills lessons scheme of learning and the baseline test. This will allow for staff to clearly identify the skills sets students have started year 7 with as well as develop them further.</p> <p>The scheme of learning will be completed and assessed by completing a series of practical tasks within lessons. These practical tasks will be marked once all 4 tasks are completed. Students will then be given chance to improve their work and reflect upon their practice.</p> | <p>Year 7 students will start on an online safety scheme of learning that will focus on the risks of using online resources, the impact they can have on people and how to prevent them. These lessons will utilise the skills learned during the skills lessons through the completion of lesson tasks.</p> <p>This will help to prepare students for both KS4 ICT and KS4 Computer Science by making students aware of the different risks of using computer systems as well as prevention methods for protecting themselves and data.</p> | <p>Students will continue to develop their understanding of online safety (risks, impact, and prevention). Spending time focusing on areas such as uses/risks of social media, fake news, and sexting.</p> <p>The scheme of learning will be completed and assessed using a self-marking quiz and the creation of an assembly style presentation based on online safety. The presentation task will have links back to the skills lessons as it requires the use of a core piece of software and requires the creation of a product for a specific audience and purpose.</p> <p>During this time, students will also take part in Computer Science week which will take up a single lesson (w/c – 6/12/2021). This will give students the chance to gain some programming experience based upon a set of given tutorials.</p> |
| 8 | <p>Year 8 students will start on a using computer systems safely scheme of learning that will focus on the risks of using online resources, the impact they can have on people and how to prevent them. These lessons will utilise the skills learned during the skills lessons through the completion of lesson tasks. This unit will reflect upon the theory covered as part of the online safety scheme of learning covered during year 7.</p> <p>This scheme of learning will help to prepare students for later life as well as KS4 ICT and KS4 computer science by reflecting upon different legal issues and how they apply to ICT and computer science.</p> | <p>Students will continue to develop their knowledge of how to use computer systems safely by completing a series of theory lessons based upon the set topics.</p> <p>Students will focus on topics of using digital apps and the risks they can pose to users and how social engineering is designed to gather information from users to gain access to personal accounts.</p> <p>The scheme of learning will be completed and assessed using a self-marking test. The test will cover all key topics taught during the unit and will provide students with instant feedback on their performance which can then be used within a student evaluation.</p> | <p>Year 8 students will start on a spreadsheets scheme of learning that will focus on developing their basic spreadsheets skills to be able to manipulate and interpret data in a variety of different forms.</p> <p>This section will focus on establishing good working practices of spreadsheets such as using formatting to change the appearance of a spreadsheet along with formulas and functions to calculate values for us.</p> <p>This scheme of learning will help to prepare students for KS4 ICT as there is a requirement to use spreadsheets to plan time within a project which requires the use of core spreadsheet skills.</p> | <p>Students will continue to develop their knowledge on the use and features of spreadsheet software. This part of the unit will focus on the application of different tools and features and how they can be applied in the review and manipulation of data.</p> <p>The scheme of learning will be completed and assessed through a practical task consisting of creating a spreadsheet and then using the spreadsheet to answer a series of questions based on data manipulation and interpretation.</p> <p>During this time, students will also take part in Computer Science week which will take up a single lesson (w/c – 6/12/2021). This will give students the chance to gain some programming experience based upon a set of given tutorials.</p> |

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| <p>9</p> | <p>Year 9 students will start on a scheme of learning aimed at the development of a website for a given scenario (the scenario is taken from an exam board specification). The lessons will focus on the development of a product by using the systems development lifecycle.</p> <p>This will require students to analyse a problem, design and create a solution, test all features of the solution, and then evaluate how well it meets the original requirements. This section will focus on the analysis and design sections to make sure that the product will meet the needs of the audience and purpose.</p> <p>This will help to prepare students for KS4 ICT as it follows the production of a product for a given audience and purpose along with the use of different pre-production design techniques.</p> | <p>Students will continue with the web development scheme of learning paying particular focus to the development, testing and evaluation sections of the scheme of learning.</p> <p>This will allow students to be able to create the product they have designed and then to make sure it all works as intended and meets the needs of the audience and purpose.</p> <p>The scheme of learning will be completed and assessed using the work from each key stage (analysis, design, implementation, testing, evaluation). Students will be given feedback at regular intervals and given time to reflect upon the feedback given and amend their work to improve the grade awarded.</p> | <p>Year 9 students will start on a scheme of learning that focuses on the development of their theory knowledge based around computer science key topics. The lessons will focus on teaching the key topics based around the KS4 computer science specification.</p> <p>This section will focus on the key areas of how the CPU and memory work together as well as computers can store and share information. This will help to prepare students for KS4 computer science as it gives them the building blocks of knowledge needed to make a successful start within the subject.</p> | <p>Students will continue with the computer systems theory scheme of learning paying particular attention to the topics related to binary representation of images, text and sound along with how computational thinking is used to design programs and the systems required for software development.</p> <p>The scheme of learning will be completed and assessed using a self-marking test. The test will cover all key topics taught during the unit and will provide students with instant feedback on their performance which can then be used within a student evaluation.</p> <p>During this time, students will also take part in Computer Science week which will take up a single lesson (w/c – 6/12/2021). This will give students the chance to gain some programming experience based upon a set of given tutorials.</p> |
| <p>10 - ICT</p> | <p>Students will be starting their first piece of coursework for the OCR Creative iMedia course. The unit of work focuses on the understanding and development of different digital graphics. Students will be completing pieces of work that focus the theory behind digital images and how they apply to the modern use of digital graphics.</p> <p>This will prepare students for future units as students will be reviewing examples and developing sound statements based upon them. These skills are needed in the following coursework units and within the exam for this course.</p> | <p>Students will be continuing with the digital graphics coursework. Students will now be focusing on planning the product that they will be creating. This will involve the use of different pre-production techniques (mind maps, mood boards, visualisation diagrams), as well as reviewing the audience and purpose for the graphic they will be creating.</p> <p>This will help to prepare students for future units as it follows the design of a product for a given audience and purpose along with the use of different pre-production design techniques which they will need to know for other coursework units and the exam.</p> | <p>Students will be continuing with the digital graphics coursework. Students will now use their time to create the digital graphic they have previously designed. This will involve the use of practical skills first covered in the photo editing unit taught in year 9. Students will document everything they do whilst editing the image and justify tools used in the process.</p> <p>This will help students to prepare for future units as they will need to be able to record the process for creating products for each piece of coursework as well as recording the details for resources used to comply with copyright legislation.</p> | <p>Students will be completing the last section required for the digital graphics coursework unit. Students will be focusing on evaluating the work they have completed against the criteria for the set project. This work will require students to look at the strengths and weaknesses of their work as well as looking at how well it meets the needs of both the audience and purpose.</p> <p>This will help students to prepare for both the exam unit and future coursework units as all remaining units require students to be able to evaluate given products (developed by the student or exam board set).</p> |
| <p>10 – Computer Science</p> | <p>Students will start by looking at the theory behind programming. This will involve reviewing different programming techniques and applying them to given scenarios.</p> <p>This portion will look at how to apply the basic programming fundamentals needed to create programs within Python (inputs, outputs, and data types). This will build on the subject knowledge gained during the Python scheme of learning (year 9). This will help students to prepare for future</p> | <p>Students will continue looking at the theory behind programming.</p> <p>This portion will look at how to apply programming fundamentals needed to create robust programs (selection statements and iterations). This will build on the subject knowledge gained during the Python scheme of learning (year 9). This will prepare students for further study as it will allow them to develop knowledge of how to apply the different programming techniques in a variety of ways and</p> | <p>Students will continue looking at the theory behind programming.</p> <p>This portion will look at how to apply programming fundamentals needed to create programs that are easy to maintain (sub programs and arrays). This will build on the subject knowledge gained during the Python scheme of learning (year 9). This will prepare students for further study as it will allow them to develop knowledge of how to apply the different programming techniques in a variety of ways and</p> | <p>Students will complete the theory behind programming section of the course.</p> <p>This portion will focus on how to make sure that programs can stop invalid data and how to make sure program code is user friendly.</p> <p>This will prepare students for further study as it will allow them to develop knowledge of how to apply the different programming techniques in a variety of ways and solidify their knowledge of</p> |

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| | units as it not only teaches them practical skills but also different computational thinking techniques. Students will have their progress reviewed on regular occasions using code challenges that test how they are able to apply what they have learned. | solidify their knowledge ready for external assessment. Students will have their progress reviewed on regular occasions using code challenges that test how they are able to apply what they have learned. | solidify their knowledge ready for external assessment. Students will have their progress reviewed on regular occasions using code challenges that test how they are able to apply what they have learned. | code maintainability and defensive design ready for external assessment. Students will have their progress reviewed on regular occasions using code challenges that test how they are able to apply what they have learned. |
| 11 - ICT | Students will start to review the theory knowledge needed for the examined portion of the course. This will focus on the use of modern technology in society. When reviewing modern technology, we will be looking at communication technology, the features and uses of cloud storage, how services and can impact the use of cloud computing and how cloud computing is used within modern business. Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. | Students will continue to review the theory knowledge needed for the examined portion of the course. Within this section we will be looking at the impact of modern technology. This will focus on areas such as the impact on how organisations work, how modern technology is used to manage teams (collaborative working), the positive and negative impact of modern technology along with how accessibility features can be used to allow access by all users. Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. | Students will continue to review the theory knowledge needed for the examined portion of the course. Within this section we will be looking at the topic of threats and cyber security. This will focus on areas such as why systems are attacked, the difference between internal and external threats, how different threats can be prevented and how policies can be used to minimise threats to data and networks. Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. | Students will continue to review the theory knowledge needed for the examined portion of the course. Within this section we will focus on ethical and legal issues of gathering, sharing and using data. We will also look at the different forms of notation that are used within ICT (flowcharts, data flow diagrams, system diagrams). Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. |
| 11 – Computer Science | Students will start to look at the different components related to unit 1 of the computer science course. This will focus on the roles that the processor and memory play within computer systems along, how they interact with secondary storage and the different types of software used by computer systems (OS, application, utility). Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. | Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on how data is stored within computer systems and how binary is used to represent text, images, and sound. This section will also include looking at how binary is converted between other data forms (decimal and hexadecimal) using maths. Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. | Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on the different types of networks that can be found within homes and businesses. Students will also be looking at how these different networks are created, and the hardware/protocols required to create and maintain them. Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. | Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on the different legal, moral, and ethical issues related to the use/disposal of computer systems and storage of data. Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions. |
| Year Group | January | February | March | April |
| 7 | Year 7 students will start a new scheme of learning based around Kodu Game Lab. This scheme of learning focuses on developing computational thinking skills, programming, and 3D design skills. | Students will continue to their programming skills by creating a game of their own design. This section will look at creating the game using the tools and techniques covered in lessons as well as evaluating how success the game was against success criteria from the first lesson. | Year 7 students will start a new scheme of learning focusing on a unit based around PC Basics. This scheme of learning focuses on how computers work and communicate with each other. Students will be looking at the different input and output devices a computer can use, the different | Students will continue to work on the PC Basics scheme of learning, focusing on how computer systems communicate with each other, what the different types of viruses are as well as how to stop them and how the different components in a computer system communicate using binary code. |

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| | <p>This section will focus on establishing what makes a successful computer game and learning the basic controls of how to use game making software.</p> <p>This will prepare them for KS4 computer science as it will allow them to develop the basic skills of problem solving and sequencing. This will also allow for preparation for KS4 ICT as it will allow for students to develop a product for a given audience and purpose.</p> | <p>This game must be suitable for a given audience and purpose (this links to KS4 ICT) and contain key sequences of programming (this links to KS4 computer science).</p> <p>The scheme of learning will be completed and assessed by creating and programming their own game. The product will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | <p>components used inside of a computer and their purpose along with the different health and safety risks people face if a computer is not used properly.</p> <p>This will prepare students for KS4 computer science as it allows them to see how a computer operates and to get a sound idea of how a computer system works.</p> | <p>The scheme of learning will be completed and assessed using a self-marking test. The test will cover all key topics taught during the unit and will provide students with instant feedback on their performance which can then be used within a student evaluation.</p> |
| 8 | <p>Year 8 students will start a new scheme of learning focusing on a unit based around Computer Systems Theory. This scheme of learning builds on the knowledge from the PC Basics unit (Year 7) and enables a student to understand how a computer system works in more detail.</p> <p>Students will be looking at how the CPU and memory work together, what hardware is needed for computers to communicate along with the different data storage methods used by computer systems to store and share data.</p> <p>This will prepare students for KS4 computer science as it allows them to see how a computer operates and to get a sound idea of how a computer system works.</p> | <p>Students will continue to work on the Computer Systems Theory scheme of learning, focusing on how images, text and sound are stored within computer systems, how computational thinking (problem solving) plays a huge role in how software programs are designed/developed along with the different tools and techniques used.</p> <p>The scheme of learning will be completed and assessed using a self-marking test. The test will cover all key topics taught during the unit and will provide students with instant feedback on their performance which can then be used within a student evaluation.</p> | <p>Year 8 students will start a new scheme of learning that focuses on control systems. This is where students will examine how computer systems are used within the real world and how they are programmed to control machinery using inputs, decisions, and outputs.</p> <p>We will start by looking at applying basic commands to control an object and how we can use these commands efficiently and will build on the sequencing skills learned in year 7 (Kodu Game Lab and Microbits). This will prepare students for KS4 computer science as it allows students to understand how commands need to be sequenced to control different systems.</p> | <p>Students will continue to work on the control scheme of learning. The focus of this scheme of learning now moves onto how embedded computer systems are used to control machinery. Students will use flowchart diagrams to control virtual machinery to complete a task. This helps students to apply the subject to real world scenarios and see how computer systems are used in a variety of different ways.</p> <p>The scheme of learning will be completed and assessed by the students creating a flowchart for a given scenario. The flowchart will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> |
| 9 | <p>Year 9 students will start a new scheme of learning that focuses on digital graphics and photo editing. This scheme of learning builds on the knowledge learned in the skills lessons (year 7) and the spreadsheets unit (year 8), as we will be developing a product for a given audience and purpose.</p> <p>Students will start this unit by looking at example graphics and seeing how different tools and techniques have been used to create them. Students will then start to gain experience with the basic tools available in photo editing software.</p> <p>This will help to prepare students for KS4 ICT as it follows the production of a product for a given audience and purpose along with the use of different pre-production techniques and software.</p> | <p>Students will continue to work on the photo editing scheme of learning. This portion will focus on applying more complex tools and techniques of photo editing software (filters, layers, effects) and the different types of image files that can be used for exporting.</p> <p>The scheme of learning will be completed and assessed by the students creating an image of their own design for a given purpose and audience. The edited image and evidence will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | <p>Year 9 students will start a new scheme of learning focusing on digital imedia. This scheme of learning builds on the knowledge learned in the skills lessons (year 7), the spreadsheets unit (year 8), website development and photo editing units (year 9) as we be looking at pre-production techniques and how audience and purpose play a big role in product development.</p> <p>Students will start this unit by looking how audience and purpose play a large role in how products are developed, the different pre-production techniques that are used when designing a product and what hardware/software is required when designing/developing imedia products.</p> <p>This helps to prepare students KS4 ICT as it covers a large portion of the core theory knowledge required to complete the different pieces of coursework and the examined unit.</p> | <p>Students will continue to work on the digital imedia scheme of learning. This portion will focus on how legislation plays a role in the design/development of different digital products and what key criteria to look for when reviewing different pre-production documents.</p> <p>This scheme of learning will be completed and assessed by the students completing a series of exam style questions. These questions will be taken from the exam boards that we use to give students a real-world example of what the exam at KS4 is like. The answers will be marked, and students will have time to reflect on their work.</p> |

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| <p>10 - ICT</p> | <p>Students will be given time to reflect upon the work they have completed for digital graphics coursework unit. This will give students time to make any corrections and improvements to their work before marking in preparation for submission to the exam board for moderation.</p> | <p>Students will start to work on the theory knowledge needed for the examined unit of the Creative iMedia course. During this time students will focus on learning outcome 1. This learning outcome focuses on the different types of pre-production documents that are needed when developing digital product. Students will be looking at the key components of these documents along with their real world uses and applications.</p> <p>This will help to prepare students for future units as it allows for students to be able to review and apply the different design techniques which will be needed within the remaining pieces of coursework. This learning outcome will be assessed through the completion of an exam-style assessment using questions taken from past exam papers.</p> | <p>Students will continue to work on the theory knowledge needed for the examined unit of the Creative iMedia course. During this time students will focus on learning outcome 2. This learning outcome looks at the different hardware/software needed during pre-production, the different pieces of legislation that impact pre-production and the different file formats used during the pre-production process.</p> <p>This will help to prepare students for future units as it allows for students to be able to understand the hardware/software they will need to complete the other units of coursework along with how legislation could impact the projects they are completing. This learning outcome will be assessed through the completion of an exam-style assessment using questions taken from past exam papers.</p> | <p>Students will continue to work on the theory knowledge needed for the examined unit of the Creative iMedia course. During this time students will focus on learning outcome 3. This learning outcome focuses on applying the knowledge learned from Learning outcome 1 in the form of developing pre-production documents. The focus is to look at how students apply the different criteria for each pre-production document and how they use the different features identified in learning outcome 1.</p> <p>This will help to prepare students for future units as it allows for students to be able to review and apply the different design techniques which will be needed within the remaining pieces of coursework. This learning outcome will be assessed through the completion of an exam-style assessment using questions taken from past exam papers.</p> |
| <p>10 – Computer Science</p> | <p>Students will start to look at the different components related to unit 1 of the computer science course. This will focus on the roles that the processor and memory play within computer systems along with how they interact with secondary storage.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on the purpose and features of an operating system along with the different types of software (application and utility), that the operating system will be able to use.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on how data is stored within computer systems and how binary is used to represent text, images, and sound. This section will also include looking at how binary is converted between other data forms (decimal and hexadecimal) using maths.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on the different types of networks that can be found within homes and businesses. Students will also be looking at how these different networks are created, and the hardware required to create them.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> |
| <p>11 - ICT</p> | <p>Students will start to look at the last coursework component required for the course. This component focuses on data gathering, manipulation and interpretation. Students will use this time to focus on the characteristics of data and information, what factors play into making high quality information, the different sectors that use data modelling and the threats that are present when dealing with data.</p> <p>Students will create a series of documents discussing these different topics which will build</p> | <p>Students will continue to look at the data gathering, manipulation and interpretation unit of coursework. Students will continue to look data collection by examining the different methods that can be used for collecting data along with how data can have an impact on decision making.</p> <p>Students will create a series of documents discussing these different topics which will build up a portfolio of evidence that is then used to assign a grade.</p> | <p>Students will continue to look at the data gathering, manipulation and interpretation unit of coursework. The students will shift their focus to looking at how different tools and techniques can be applied to manipulate data. This involves looking at formulas, functions, filters, formatting spreadsheets suitably and altering the form of data to make it easy to interpret.</p> <p>Students will create a series of documents discussing these different topics which will build up a portfolio of evidence that is then used to assign a grade.</p> | <p>Students will continue to look at the data gathering, manipulation and interpretation unit of coursework. The students will shift their focus to looking at using data to identify patterns and trends for different purposes as well as how the presentation of data can impact how well data is interpreted and understood.</p> <p>Students will create a series of documents discussing these different topics which will build up a portfolio of evidence that is then used to assign a grade</p> |

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| | up a portfolio of evidence that is then used to assign a grade. | | | |
| 11 – Computer Science | <p>Year 11 students will start to look at the different topics related to unit 2 of the GCSE Computer Science course. This will focus on topics related to computational thinking and problem solving as well as how they are applied to developing programs for given scenarios.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different topics related to unit 2 of the GCSE Computer Science course. This will focus on the different types of algorithms that are used for sorting and searching data as well as how they are applied within programs.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different topics related to unit 2 of the GCSE Computer Science course. This will focus on programming techniques (sequence, selection, iteration and storage), and how Boolean logic plays a role in algorithm design and data flow.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different topics related to unit 2 of the GCSE Computer Science course. This will focus on the area of software development and the various factors that can play a role in developing a successful program (defensive design, testing, trace tables, translators and IDEs).</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> |
| Year Group | May | June | July | |
| 7 | <p>Year 7 students will start a new scheme of learning aimed at developing basic programming skills using Microbits. This scheme of learning builds on what they have learned during the Kodu Game Lab scheme of learning.</p> <p>Students will focus on how to use the various inputs (buttons and sensors) of a Microbit as well as using both text and image-based outputs.</p> <p>This will prepare students for KS4 Computer Science as it allows for students to understand the basic concepts of programming and how to use computational thinking to solve different program-based problems.</p> | <p>Students will continue with the Microbits scheme of learning. This portion will focus on how to apply selection statements and iterations to create more robust computer programs.</p> <p>The scheme of learning will be completed and assessed by the students creating a program that meets the needs of a given scenario. The program will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | <p>Year 7 students will complete a short scheme of learning based upon video editing. This scheme of learning builds on the audience and purpose knowledge students have developed during the skills for business scheme of learning.</p> <p>Students will focus on how to apply and manipulate different media (images, text, video, sound), to create a video for a given purpose.</p> <p>This will prepare students for KS4 ICT as it helps students to understand how to develop products for different audiences and purposes as well as develop the practical skills they will need when completing coursework projects.</p> <p>The scheme of learning will be completed and assessed by the students creating a video that meets the needs of a given scenario. The video will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | |
| 8 | <p>Year 8 students will start a new scheme of learning aimed at developing programming skills using the Small Basic programming language. This scheme of learning builds on what has been taught during Kodu Game Lab (year 7), Microbits (year 7) and Control (year 8).</p> | <p>Students will continue with the Small Basic programming scheme of learning. This portion will focus on how to make programs more efficient by using iterations (loops), and sub programs.</p> | <p>Year 8 students will complete a short scheme of learning based upon using HTML to create websites.</p> <p>Students will review and apply the different tags needed to add in text and images to a website as</p> | |

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| | <p>Students will focus on the use of inputs/outputs within programs, how different data types can impact how a program runs and how to use selection statements to allow a program to be able to make basic choices.</p> <p>This will prepare students for KS4 Computer Science as it allows for students to understand the different concepts of programming (sequence, selection, iteration), as well as develop the problem-solving skills, they will need to complete algorithm tasks.</p> | <p>The scheme of learning will be completed and assessed by the students creating a program that meets the needs of a given scenario. The program will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | <p>well as format the website to change its appearance (background colours, font styles, font colours).</p> <p>This will prepare students for KS4 Computer Science as it helps students to understand how sequencing plays a role within successful programs and how minor errors can have a great impact on how a program operates.</p> <p>The scheme of learning will be completed and assessed by the students creating a single page website that meets the needs of a given scenario. The website will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | |
| 9 | <p>Year 9 students will start a new scheme of learning aimed at developing programming skills using the Python programming language. This scheme of learning builds on what has been taught during Kodu Game Lab (year 7), Microbits (year 7), Control (year 8), Small Basic (year 8) and HTML (year 8).</p> <p>Students will focus on the use of inputs/outputs within programs, how different data types can impact how a program runs and how to use selection statements to allow a program to be able to make basic choices.</p> <p>This will prepare students for KS4 Computer Science as it allows for students to understand the different concepts of programming (sequence, selection, iteration), as well as develop the problem-solving skills, they will need to complete algorithm tasks.</p> | <p>Students will continue with the Python programming scheme of learning. This portion will focus on how to make programs more efficient by using iterations (loops), sub programs and arrays to store data.</p> <p>The scheme of learning will be completed and assessed by the students creating a program that meets the needs of a given scenario. The program will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | <p>Year 9 students will complete a short scheme of learning based upon developing products for business scenarios.</p> <p>Students will create a variety of different business documents (presentation, letter, spreadsheet, database), that demonstrate how different tools can be used within software to produce professional products.</p> <p>This will prepare students for KS4 ICT as it follows the production of products for a given audience and purpose along with the use of different pre-production techniques and software. This will also help students to prepare for any other subject at KS4 as it will refine their skills within key software that they will have to use to complete project work.</p> <p>The scheme of learning will be completed and assessed by the students creating a range of products that meet the needs of given scenarios. The products will be marked, and students will then be given chance to improve their work and reflect upon their practice.</p> | |
| 10 - ICT | <p>Students will continue to work on the theory knowledge needed for the examined unit of the Creative iMedia course. During this time students will focus on learning outcome 4. This learning outcome focuses on the reviewing of pre-production documents with the intent of</p> | <p>Students will be the next piece of coursework for the OCR Creative iMedia course. The unit of work focuses on the understanding and development of multipage websites.</p> | <p>Students will continue with the multipage website coursework unit. Students will now be focusing on planning the product that they will be creating. This will involve the use of different pre-production techniques (mind maps, mood boards, visualisation diagrams), as well as reviewing the</p> | |

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| | <p>identifying the strengths, weaknesses, and areas for improvement.</p> <p>This will help to prepare students for future units as it allows for students to be able to review examples and then see what could be done better. This can be applied in the evaluation section of future coursework units as students will need to be able to review the strengths and areas for development of their own coursework. This learning outcome will be assessed through the completion of an exam-style assessment using questions taken from past exam papers.</p> | <p>Students will focus on developing their understanding of how websites are made as well as the key features that must be included to make a website successful. Students will also look at how bandwidth and data transfer speed play a role on how successful a website is.</p> <p>This will prepare students for future units as students will be reviewing examples and developing a sound understand of how they work. These skills are needed in the following coursework units and within the exam for this course.</p> | <p>audience and purpose for the multipage website they will be creating.</p> <p>This will apply the knowledge gained from the previous coursework and examined unit and allow for students to demonstrate what they have learned.</p> <p>This will help to prepare students for future units as it follows the design of a product for a given audience and purpose along with the use of different pre-production design techniques which they will need to know for other coursework unit.</p> | |
| 10 – Computer Science | <p>Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on the software and protocols needed to create different networks and to allow the transfer of data between computers and servers over the internet.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will continue to look at the different components related to unit 1 of the computer science course. This will focus on the different legal, moral, and ethical issues related to the use/disposal of computer systems and storage of data.</p> <p>Students will be assessed using exam questions taken from past papers. These questions will be marked, and students will be allowed time to reflect upon their practice and make any corrections to how they answer exam-style questions.</p> | <p>Students will complete the theory work related to unit 1 of the computer science course.</p> <p>Students will be given time to reflect upon their exam skills and knowledge from the year and create a series of revision resources.</p> <p>Students will also be set a programming project to complete to maintain their programming skills and assess how they have developed throughout the academic year.</p> | |
| 11 - ICT | <p>Support to complete coursework:</p> <p>This will include...</p> <ul style="list-style-type: none"> - Reviewing of coursework material and comparing against mark scheme and assessment criteria. - Review of key criteria for the coursework unit. | <p>Support to complete coursework:</p> <p>This will include...</p> <ul style="list-style-type: none"> - Reviewing of coursework material and comparing against mark scheme and assessment criteria. - Review of key criteria for the coursework unit. - | | |
| 11 – Computer Science | <p>Revision and Preparation for Examinations</p> <p>This will include:</p> <ul style="list-style-type: none"> - Creation of revision materials - Applying past exam questions to give students an idea of the answer structures required. - Self-assessment using topic sheets and revision materials. | <p>Revision and Preparation for Examinations</p> <p>This will include:</p> <ul style="list-style-type: none"> - Creation of revision materials - Applying past exam questions to give students an idea of the answer structures required. - Self-assessment using topic sheets and revision materials. | | |