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| **Term** | **Module Title** | **Learning Content / Skills** | **Assessment Schedule\*** | **Home Learning Support** |
| Autumn 1 | Visual Basic  and NEA | Students will spend the first part of this term continuing to work on developing their knowledge of Visual Basic in preparation for their Non-Examined Unit. The unit will look at basic understanding such as inputs, outputs, loops and selection as well as using lists, arrays, sorting and reading and writing to files.  Students will also be reminded what is required when documenting their work for the Non-Examined Unit including analysis, design, implementation, testing and evaluation.  Towards the end of the term students will undertake their NEA. This is a 20 hour long controlled assessment which must be undertaken in the classroom. | Students will be given problems to solve using Visual Basic to help determine their understanding of each section. At the end of each section a longer solution will be needed to be completed by the students along with annotation of the code.  Peer assessment is used on the smaller tasks which will allow the students to understand clearly what is required for the exam by using mark schemes.  Time is given for students to improve their code in lesson. | Students should be practising programming in Visual Basic in their own time. They can remote access onto the school network and use Visual Basic. There are tutorials on Firefly but we also encourage students to access online tutorials as well. The more coding can be done the better. |
| Autumn 2 | Non-Examined Unit | This half term students will be completing their NEA. Students will be working controlled assessment conditions and will not be allowed to communicate with other members of the class and will not have access to the Internet during this time. | Due to exam board regulations, student work completed in controlled assessment is not allowed to be marked by the teacher until the task is completed. This is then not allowed to be feedback to the student.  During this time, students will be given theory worksheets for homework covering the topics in Year 10 to help with their revision. | Students are not allowed to access their work outside of the lesson for the NEA. However, students should still be practicing their Visual Basic skills, using tutorials. |
| Spring 1 | Unit 7 Logic and Languages  Unit 8 Data Representation (first half) | Unit 7 This unit begins with a lesson on Boolean logic diagrams and truth tables. Following this, students will cover translators and the facilities of languages. Testing and error handling is covered using practical examples, including the use of the common tools and functions of an IDE. The unit concludes by looking at programming language classifications including translators and low-level languages. A test is provided with GCSE style questions to assess understanding across all lessons in the unit.  The following Topics are covered   * Topic 1 Logic diagrams and truth tables * Topic 2 Defensive Design * Topic 3 Errors and Testing * Topic 4 Translators and facilities of languages   Unit 8 The conversion of integers from denary to binary is covered in the first lessons, together with simple binary addition, overflow and shifts. Check digits are also covered by practical example. In subsequent lessons, the use of hexadecimal numbers and the binary representation of characters is described.  The following Topics are covered   * Topic 1 Storage units and binary numbers * Topic 2 Binary arithmetic and hexadecimal * Topic 3 Ascii and Unicode | Students will be assessed at the end of each topic to demonstrate understanding. At the end of the unit a formal assessment will be given determining in more depth the students understanding the whole unit.  Peer assessment is done regularly with end of lesson assessments to help the students understand clearly what is required for the exam by using mark schemes.   Reflection time will be given to students to work on their targets which will allow for an improvements in their grades on work which has already been marked. | All presentations, tasks and worksheets are on Firefly which allows students to revisit any topics covered in this unit.  Students also have access to the Cambridge GCSE MOOC website which provides videos and resources to help reinforce the students understanding of the topics. The link for this website can be found on the Computing section of Firefly. |
| Spring 2 | Unit 8 Data Representation (second half)  Revision | Unit 8 The final part of this unit is covered, including the representation of images and sound, and compression techniques. In the final lesson students sit an assessment test comprising questions similar to those found on the OCR exam paper.  The following topics are covered   * Topic 4 Images * Topic 5 Sound * Topic 6 Compression   Students will then be preparing for their exams in lesson. Past papers, mark schemes, repetitive spaced memory techniques will all be covered. | Students will be assessed at the end of each topic to demonstrate understanding. At the end of the unit a formal assessment will be given determining in more depth the students understanding the whole unit.  Peer assessment is done regularly with end of lesson assessments to help the students understand clearly what is required for the exam by using mark schemes.   Reflection time will be given to students to work on their targets which will allow for an improvements in their grades on work which has already been marked. | All presentations, tasks and worksheets are on Firefly which allows students to revisit any topics covered in this unit.  Students also have access to the Cambridge GCSE MOOC website which provides videos and resources to help reinforce the students understanding of the topics. The link for this website can be found on the Computing section of Firefly. |
| Summer 1 | Revision | Students will continue to prepare for their June exams. Past papers, mark schemes, repetitive spaced memory techniques will all be covered. | In class Walking talking mocks as well as closed book mocks will take place.  Peer marking will be used in some cases to aid with the understanding of the exam paper and how the examiner will be marking their papers. | Revision techniques such as past papers, flash cards and repetitive spaced memory techniques.  Students also have access to the Cambridge GCSE MOOC website which provides videos and resources to help reinforce the students understanding of the topics. The link for this website can be found on the Computing section of Firefly. |
| Summer 2 | Revision | Paper One Exam  Paper Two Exam  Students will continue to prepare for their June exams. Past papers, mark schemes, repetitive spaced memory techniques will all be covered. | In class Walking talking mocks as well as closed book mocks will take place.  Peer marking will be used in some cases to aid with the understanding of the exam paper and how the examiner will be marking their papers. | Revision techniques such as past papers, flash cards and repetitive spaced memory techniques.  Students also have access to the Cambridge GCSE MOOC website which provides videos and resources to help reinforce the students understanding of the topics. The link for this website can be found on the Computing section of Firefly. |