Year 10

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | Theme | What students will learn | Key assessment | How you can support your child |
| 1 | Problem Solving | * Algorithms, what they are, the main standard algorithms and how to document and interpret them in pseudo code and flow chart form.
* Decomposition and abstraction, through investigating and analysing problems.
 | End of topic test | * Download the Python integrated development and learning environment to practise python programming skills at home.
* Use the Bitesize GCSE website.
* Get a copy of the Revise Edexcel GCSE (9-1) Revision Guide.
 |
| 2 | Programming | * Develop code in the high-level language python.
* Identify and troubleshoot errors.
* Understand the structural components of a program.
* Understand the data types and structures involved in programming.
* Understand how to use variables, operators and subprograms.
 | On-going based on programming skills in Python |
| 3 | Data and NEA preparation | * Learn about the binary system.
* Understand data representation in computing.
* Learn about data storage and compression.
* Prepare for the non-examined component of the course.
 | End of topic test |
| 4 | Data and NEA preparation | * Learn about encryption and databases structures.
* Continue to prepare for the NEA.
 | End of topic test |
| 5 | Computers and NEA | * Understand the input-process-output model.
 | End of topic test |
| 6 | Computers and NEA | * Learn about the hardware, logic, software and programming languages used by computers.
 | Synoptic end of Year 10 exam. |

Year 11

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | Theme | What students will learn | Key assessment | How you can support your child |
| 1 | Communication and the Internet and NEA | * Networks
* Network security
 | N/A | * Download the Python integrated development and learning environment to practise python programming skills at home.
* Use the Bitesize GCSE website.
* Get a copy of the Revise Edexcel GCSE (9-1) Revision Guide.
 |
| 2 | Communication and the Internet and NEA | * The internet and the world wide web.
 | Mock Exam (Paper 2) |
| 3 | The Bigger Picture  | * understand the environmental impact of technology (health, energy use, resources) on society
* understand the ethical impact of using technology (privacy, inclusion, professionalism) on society
* understand the legal impact of using technology (intellectual property, patents, licensing, open source and proprietary software, cyber-security) on society
 | End of topic assessment |
| 4 | Revision of topics and exam prep | Topics as above | Mock Exam 2 (Papers 1 and 2) |
| 5 | Revision of topics and exam prep | Topics as above | N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Term | Theme | What students will learn | Key assessment | How you can support your child |
| 1 |  | Students will recap knowledge of the eat well guide and then focus on food groups to include dairy, meat and fish | Practical activities including Cheesecake, chicken pie and fish pie | Prepare and cook meals at home. Discuss nutrition and eating healthily |
| 2 | Focus on food  | Students will learn about fruit and vegetables in the diet and carry out a focused practical task related to fruit and vegetables | Testing of knowledge through an assessment based on designing a product to include a range of fruit and vegetables | Looking at seasonal food when in supermarket and farmer’s marketsWatching Cookery programmes |
| 3 | Safe Food | Students will learn about what makes food decay, how to prevent food spoilage and methods of preservation. Practical work includes lemon curd and risotto | Practical activities including lemon curd and risotto | Use websites at home including the British Nutrition Foundation and Food a fact of life |
| 4 | Safe Food | Students will learn about food safety and storage and use of the fridge and freezer  | Assessment based on designing a cook chill product and making the outcome | Drawing at home, collecting recipes and watching cookery programmes |
| 5 | Special Diets | Students will learn that different groups of people have different dietary needs. They will learn that here are many factors that can affect someone’s dietary choices. These include age, diet-related illnesses, religion, culture, ethical and moral reasons.  | Assessment based on creation of a product to meet a special diet | Drawing at home, collecting recipes and watching cookery programs |
| 6 | Special Diets | Students will learn about food intolerances and allergies | Practical work including gluten free products, low fat dishes and low sugar productsEnd of year assessment | Use of magazines and Jamie Oliver website for special diets |