**Curriculum Mapping 2022-23**  **Subject:**  **INFORMATION TECHNOLOGY** **Curriculum Leader (s)**  **PEL**

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|  | **KS3 Curriculum**   1. Teaching crucial knowledge. 2. Exposing to key vocabulary. 3. Developing cultural capital. 4. Enabling the development of knowledge. 5. Challenging misconceptions. 6. Emphasising inter-connectedness. 7. Teaching and development of skills. | | | **KS4 Curriculum**   1. Transition to education after KS4 2. Developing further on the attitudes and attributes for success. 3. Building on all areas from KS3 and Accelerated Curriculum. 4. Guidance for next stage of education | | **KS5 Curriculum**   1. Transition to HE/FE/Employment (including apprenticeship). 2. Developing further on the attitudes and attributes for success. 3. Building on all areas from KS3 and KS4. | |
|  | **Year 7** | **Year 8** | **Year 9** | **Year 10** | **Year 11** | **Year 12** | **Year 13** |
| **Spiral**  **Curriculum** | **Vertically integrated across Key Stages – Each KS** | | | | | | |
| **Skills** | Computational thinking  Abstraction  Decomposition  Algorithmic thinking  Problem solving  Coding (Scratch & Python)  Spreadsheet Modelling  Mathematical Concepts  Communication | Computational thinking  Abstraction  Decomposition  Algorithmic thinking  Problem solving  Coding (Scratch & Python)  Spreadsheet Modelling  Mathematical Concepts  Communication | Computational thinking  Abstraction  Decomposition  Algorithmic thinking  Problem solving  Coding (Scratch & Python)  Spreadsheet Modelling  Mathematical Concepts  Communication  Investigation and practical application  Analysis and evaluative skills  Design and implementation | * Research skills * Report writing * Communication * UI Analysis, development and design * Evaluation * Extended writing | * Research skills * Report writing * Communication * Data analysis * Data modelling planning and development * Evaluation * Decision making * Extended writing * Revision/Exam Practice   \*Skills for Exam needs to be added | * Research skills * Report writing * Referencing * Communication * self-management * Database planning, development and evaluation * problem-solving | * Report writing * Referencing * Spreadsheet planning, development and evaluation * Extended writing * Meeting deadlines * Analysis * Communication * self-management |
| **Knowledge & Understanding**  **Key Topics per half Term** | T1 – Introduction to IT facilities, rules & rituals, expectations  E-safety  T2 – Introduction to Computer Science (PEL lessons)  T3 – Computer Networks  T4 – Spreadsheet Modelling  T5 – Scratch Programming  T6 – Scratch Programming | T1 – Introduction to IT facilities, rules & rituals, expectations  E-safety  T2 – Computer Systems  T3 – Spreadsheet Modelling  T4 – Spreadsheet Modelling  T5 – Python Programming  T6 – Python Programming | T1 – Introduction to IT facilities, rules & rituals, expectations  E-safety  T2 – Cybersecurity  T3 – Data Science  T4 – Data Science  T5 – Physical Computing (micro:bit)  T6 – Physical Computing (micro:bit) | T1: User interface analysis, report writing  T2: CW 1 begins & project planning techniques, design and develop user interface & review  T3: Complete CW 1  T4: Begin spreadsheet CW 2  T5: Complete spreadsheet unit CW  T6: Start Comp 3: Exam Unit Prep | T1: Data and data analysis, report writing  T2 – Review Spreadsheet skills, start C/W & Theory  T3 – Continue C/W & continue theory  T4 – Continue to CW & prep for C3  T5 – Exam prep & Completion on C/W  T6 | Unit 2 – Exam  T1: Introduction to DBs – basic skills  T2 – Working through past paper & covering theory  T3 – Jan 1st exam entry  T4 – Revision for next exam//coursework catch up  T5 – May Retake  T6 – Preparation for Unit 1 Exam Unit (Year 13)  Unit 3: Coursework  T1 – Learning Aim A theory + coursework  T2 – Coursework completion  T3 – Learning Aim B+C theory + coursework  T4 – Coursework completion  T5 – Preparation for Unit 1 Exam unit (Year 13)  T6 – Preparation for Unit 1 Exam Unit (Year 13) | Unit 1: Exam  T1 – Learning Aim A & B  T2 – Learning Aim C, D & E. Mock assessment 1  T3 – Learning Aim F & working through practice exam. Mock assessment 2  T4 – Revision. Mock assessment 3  T5 - Revision  T6  Unit 5: Coursework  T1 – Introduction to use DM in business, mini spreadsheet skills audit & learning aim A  T2 – Coursework completion for Assignment 1. Learning Aim B+C theory  T3 – Refresh Spreadsheet skills. Release coursework assignment 2  T4 – Final coursework completion of assignment 2  T5 – Wrap up on coursework  T6 |
| **Common Assessment of Progress and Performance**  **(CAPP)** | Use of MCQs  One formal assessment per half term | Use of MCQs  One formal assessment per half term | Use of MCQs  One formal assessment per half term | Coursework components 1 & 2  Component 3 – Exam Unit – topic test  Knowledge Organisers/Retrieval Grids | Coursework component 2  Component 3 – Exam Unit – topic test as well as full paper assessment, termly (Christmas & Easter)  Knowledge Organisers/Retrieval Grids | Unit 2  Knowledge Organisers/Retrieval Grids  Topic tests  Mock assessment in November and March  Unit 3  Knowledge Organisers/Retrieval Grids  Coursework Assignments 1 & 2 | Unit 1  Knowledge Organisers/Retrieval Grids  Topic tests  Mock assessment in November and March  Unit 5  Knowledge Organisers/Retrieval Grids  Coursework Assignments 1 & 2 |
| **Wider Curriculum including extracurricular opportunities**  **e.g SMSC ,Careers and Employability , Literacy and Numeracy** | * Careers showcasing CS via code.org * STEM Ambassadors'’ visits/talks either in person or virtually | * Careers showcasing CS via code.org * STEM Ambassadors'’ visits/talks either in person or virtually | * Careers showcasing CS via code.org * Amazon Future Engineer Virtual FC Tour * STEM Ambassadors'’ visits/talks either in person or virtually | * BIMA mix of IT & CS * STEM Ambassadors'’ visits/talks either in person or virtually | * STEM Ambassadors'’ visits/talks either in person or virtually | Conference \*\*  Social media business presenter early on  Business studies session for unit 3 Marketing | Conference \*\* |
| **Attitudes & Attributes**  **Growth Mindset,**  **Independent Learning** | * T2 Topic – problem solving * T5&6 – programming unit, creativity, resilience, problem solving | * T5&6 – programming unit, creativity, resilience, problem solving | * T5&6 – programming unit, creativity, resilience, problem solving | * Checklist * Progress Tracker with formal & informal assessments dates on | * Give the dates and get coursework done early * Make sure they can see their assessment grades to see progress * Checklists * Tracker | * Use of study periods * Having an area for resources for independent learning activities * Specific activities on project management and communications * Overall planning & Organisation * Up to date videos for independent learning * Mr Ali & Ms Edwards | GCFree |

**Intent –** Implementation – Impact

Intent - The ambitions and plans that are in place up to the point of delivery

Implementation – the means for how these are delivered and assessed

Impact – the achievements of students as evidence by work produced, attitudes to learning, participation in extra curricular, summative assessment and final outcomes

Our definitions

**Spiral Curriculum**

How the building blocks of our curriculum are constructed and built upon through students’ journey through school