**Y7 Computing Curriculum Progression Map**

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|  | **Term 1** | **Term 2** | **Term 3** | **Term 4** | **Term 5** | **Term 6** |
| **Dates** | 4th September 2023 – 27th October 2023 | 6th November 2023 – 22nd December 2023 | 8th January 2024 – 9th February 2024 | 19th February 2024 – 28th March 2024 | 15th April 2024 – 24th May 2024 | 3rd June 2024 – 19th July 2024 |
| **Weeks** | 8 | 7 | 5 | 6 | 6 | 6 |
| **Lessons** | 8 | 7 | 5 | 6 | 6 | 6 |
| **Unit Title** | Collaborating online respectfully | Online Safety lessons | Modelling Data (Spreadsheets) | Complete Spreadsheets / Programming in Scratch | Complete Programming / Networks | Networks: from semaphores to the internet |
| **Sequence** | Logging in.  Managing online information  Privacy and Security  Copyright and Ownership  Secure passwords  School network / Rules of the computing room.  Documents and common applications.  Using email effectively.  \*Reading opportunity -cyberbullying task | Plan effective presentation for a given audience.  Explain the effects of cyberbullying.  Plan effective presentation for a given audience.  Explain the effects of cyberbullying.  \* Reading opportunities in the presentation tasks, also the cyberbullying task and Knowledge organiser  \*Careers in Computing. | Spreadsheets and formatting techniques.  Formulas with cell references (+, -, \*, /). Autofill tool.  Data and information. Primary and secondary sources of data.  Collecting and analysing data. Charts / Graphs  Functions SUM, COUNTA, MAX, and MIN.  Sort and filter data.  Functions AVERAGE, COUNTIF, and IF in a spreadsheet.  Conditional formatting  Careers - how spreadsheets are used in the real world  \* Reading opportunities in the presentation tasks, also the CGP KS3 Computing book. Spreadsheets p.54-56 and Knowledge organiser | Complete Spreadsheets  Functions AVERAGE, COUNTIF, and IF in a spreadsheet.  Conditional formatting  Careers - how spreadsheets are used in the real world  Introduction to programming and sequencing  Sequence and variables  Selection  Operators  Count controlled iteration  Problem solving  \* Reading opportunities in the presentation tasks, the KS3 Computing book, programming in Scratch p.112-p.116 and Knowledge organiser | Complete programming unit.  Iteration (Loop) as a group of instructions that are repeatedly executed.  Detect and correct errors in a program (debugging).  Decomposition  Careers – what programmers do  \*Reading opportunities in the presentation tasks, CGP KS3 Computing book, programming in Scratch p.112-p.116 and Knowledge organiser  \*Reading opportunities in the presentation tasks, also the CGP KS3 Computing book. Networks p.19- p.24 and Knowledge organiser | Complete Networks  Computer networks and protocols  Networking hardware.  Wired and wireless networks.  The internet  The internet services and Internet of things  The World Wide Web  Careers –networks  \*Reading opportunities in the presentation tasks, also the CGP KS3 Computing book. Networks p.19- p.24 and Knowledge organiser |
| **Key Building Blocks** | Recap using AB tutor how to log in, how to use computers safely and how to choose a secure password.  Students learn how to send and reply to emails.  Students learn about online safety. | Students understand through demonstration of tasks. Recap using AB tutor how to log in, how to use computers safely. | Planning and creating a spreadsheet  Formatting a spreadsheet  Using formula  Setting up worksheets and workbooks | Students understand through demonstration, use AB tutor how to use Scratch and insert sprites, check their code, test their work ongoing and their final project. | Students understand through demonstration, use AB tutor how to use Scratch and insert sprites, check their code, test their work ongoing and their final project. | Demonstrate how the school network operates so students can see what a computer network does e.g. files, printer, storage.  Internet of Things – use an example e.g. toys, what data they store, how it could be dangerous, leaked etc.  . |
| **Retrieval Practices** | Do now. Demonstrating and using presentations. Recap and demonstration of skills to ensure understanding - Demonstration using examples in the real world (careers) and where it applies to task - AB Tutor Computer Control to ensure understanding and re-cap/VF - VF throughout | Do now. Demonstrating and using presentations. Recap and demonstration of skills to ensure understanding - Demonstration using examples in the real world (careers) and where it applies to task - AB Tutor Computer Control to ensure understanding and re-cap/VF - VF throughout | Do now. Demonstrating skills, presentations. Recap of skills to ensure understanding of task - Demonstration using examples in the real world (careers) and where it applies to task - AB Tutor Computer Control to ensure understanding and re-cap/VF - VF throughout | Do now. Demonstrating skills, presentations. Recap of skills to ensure understanding of task - Demonstration using examples in the real world (careers) and where it applies to task - AB Tutor Computer Control to ensure understanding and re-cap/VF - VF throughout | Do now. Demonstrating skills, presentations. Recap of skills to ensure understanding of task - Demonstration using examples in the real world (careers) and where it applies to task - AB Tutor Computer Control to ensure understanding and re-cap/VF - VF throughout | Do now. Demonstrating presentations. Recap and demonstration of skills to ensure understanding - Demonstration using examples in the real world (careers) and where it applies to task - AB Tutor Computer Control to ensure understanding and re-cap/VF - VF throughout |
| **Key Skills** | Language & Vocabulary  Written Communication  Review | Language & Vocabulary  Written Communication  Review | Language & Vocabulary  Written communication  Analysis  Problem Solving | Language & Vocabulary  Written communication  Analysis  Problem Solving | Language & Vocabulary  Written communication  Problem Solving | Language & Vocabulary  Written communication  Planning  Evaluation |
| **Literacy** | Written & Oral communication  Tier 2 & 3 vocabulary | Written & Oral communication  Tier 2 & 3 vocabulary | Written & Oral communication  Tier 2 & 3 vocabulary development | Written & Oral communication  Tier 2 & 3 vocabulary development | Written & Oral communication  Tier 2 & 3 vocabulary development | Written & Oral communication  Tier 2 & 3 vocabulary development |
| **Tier 2** | Computing, accounts, describe, passwords, discuss, advantages, disadvantages, audience, consequences, Plagiarism | Advantages, disadvantages, audience, consequences, Plagiarism reliability, validity, information. | Formatting, analysis, data, information, primary, secondary, graph add, subtract, divide and multiply. | Programming  Score, time, levels, repeat, loop, describe, discuss, audience, advantages, disadvantages, add, subtract, divide and multiply | Programming  Score, time, levels, repeat, loop, audience | PC - Input devices e.g. keyboard, microphone, mouse, scanner,. Output devices e.g., Monitor, Printer, Speakers, Lights, Headphones, Projector. Internet, collect, share, information, describe, discuss, evaluate, target audience, advantages, disadvantages |
| **Tier 3** | Files, Folders, Internet, username, password, school network, user area, email, cyberbullying, illegal downloading, Copyright | Illegal downloading, Copyright, cyberbullying, illegal downloading, Copyright, plagiarism | Illegal downloading, Copyright, e-commerce, Online Marketplaces, Navigating websites, Search engine rankings.  Conditional formatting, primary, secondary, modelling data. | Programming, Sequence, selection, and iteration. Sub-routine, decomposition, repetition, variables, algorithm, sprites. | Programming, Sequence, selection, and iteration. Sub-routine, decomposition, repetition, variables, algorithm, sprites. | Networks, LAN, WAN, Internet of Everything, Applications (apps), connectivity, download, smart, download, protocols, packets, and addressing. |
| **Numeracy** | file size  Passwords  Number of slides  Order of slides  Timings | e-commerce  Search engine rankings  Websites, number of hits. | Formula  Cells  Data types e.g. £ currency | Programming  Variables  Time  Score | Programming  Variables  Time  Score | Networks  Internet Speeds |
| **Formative Assessment** | Verbal feedback throughout each lesson  Re-cap of tasks using Computer Control monitoring software | Verbal feedback throughout each lesson  Re-cap of tasks using Computer Control monitoring software | Verbal feedback throughout each lesson  Re-cap of tasks using Computer Control monitoring software | Verbal feedback throughout each lesson.  Re-cap of tasks using Computer Control monitoring software  Pair programming project that learners will complete. | Verbal feedback throughout each lesson.  Re-cap of tasks using Computer Control monitoring software  Paired programming | Verbal feedback throughout each lesson.  Re-cap of task and assignment using Computer Control monitoring software |
| **Summative Assessment** | Multiple choice assessment.  Final product as evidence. | Final product as evidence.  Yacapaca | Multiple choice assessment.  Yacapaca | Multiple choice assessment. | Multiple choice assessment. | Multiple choice assessment.  Yacapaca |
| **Spiritual** | Cyberbullying- Students gain an understanding of how people feel when they are being Cyberbullied and the effects this can have on a person. The students spend time reflecting on how e-safety and cyberbullying can affect people both emotional and physical and how they can develop their work to fascinate their target audience. | Students consider their own progress and support the progress of others, whilst also building relationships | Students consider their own progress and support the progress of others, whilst also building relationships | Scratch - using their own imaginations and creativity students are able to design their own sprites, backgrounds and scripts. Self/Peer assessment. | Students consider their own progress and support the progress of others, whilst also building relationships. | Students consider their own progress and support the progress of others, whilst also building relationships. |
| **Moral** | Moral values and ethical issues considered in cyberbullying. Students also consider the consequences of their actions for example: Criminal records for Cyberbullying and breaking the copyright law. | Students consider the consequences of their actions for example: Criminal records for breaking the copyright law. Moral values and ethical issues considered. Creative Commons/plagiarism | Encourage respect for the computer room and the equipment they use and how this affects others. | Students consider the moral use of programming. Hacking and ethical hacking. Computer Misuse Act. | Students consider the moral use of programming. Hacking and ethical hacking. Computer Misuse Act. | Networks. Students consider the moral use of the internet and www. Links to legislation.  Students consider the health and safety issues involved with working in Computing/IT.  . |
| **Social** | Peer work and assessments as and where appropriate and reflective evaluations allow students to consider their progress and support the progress of others, whilst also building relationships. Students gain an understanding of how they should be socialising online and discuss how they should resolve any conflicts that they may have with other people. | Social online, hits, likes, comments – students will learn how to check the validity of these. | Students will learn how to use computers effectively and ethically. Students will learn about the use and abuse of personal data and how it can be prevented from happening.  Peer work and assessments as and when appropriate and reflective evaluations allow students to consider their progress and support the progress of others, whilst also building relationships. | Scratch – Students work together (where appropriate to lesson) explaining what the student did well and what improvements they could make to the game. All students are encouraged to verbally communicate with one another to discuss any improvements needed to the game. Peer work and assessments as and when appropriate and reflective evaluations allow students to consider their progress and support the progress of others, whilst also building relationships. | All students are encouraged to verbally communicate with one another to discuss any improvements needed to their work. | All students are encouraged to verbally communicate with one another to discuss any improvements needed to their work. |
| **Cultural** | Cultural awareness of their audience when they are creating their final document | Cultural awareness of their audience when they creating their documents. | Students see how closely computing can link with maths as they are required to create a spreadsheet and analyse data, create formula and functions to perform simple and complex calculations. | Scratch - When students are creating a program, they need to consider how they can attract a diverse audience. | Scratch - When students are creating a program, they need to consider how they can attract a diverse audience. | Creating a presentation to reach a wide target audience. Thinking about networks in their school and across the world keeping people connected. |
| **British Values** | Mutual respect, the rule of law | Mutual respect, the rule of law | The rule of law, mutual respect | Mutual respect, the rule of law | Mutual respect, the rule of law | Mutual respect, the rule of law |
| **Gatsby 4** | Digital graphics designer, network manager | Website creator, marketing online, social media business | Accountant, data manager, finance | Programming industry, Software tester | Programming industry, Software tester | Network manager, IT Technician |