| **Term** | **Computing Topic** | **Knowledge and understanding** | **What I will know and remember**  | **Vocabulary** |
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| **Online Safety KS2:** Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |
| **1** | **Unit 6.1 - Computing systems and networks – Communication** | Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration | I can explain the importance of internet addresses.I can recognise how data is transferred across the internet.I can explain how sharing information online can help people to work together.I can evaluate different ways of working together online.I can recognise how we communicate using technology.I can evaluate different methods of online communication. | communication, protocol,data, address, InternetProtocol (IP), Domain NameServer (DNS), packet,header, data payload, chat,explore, slide deck, reuse,remix, collaboration,internet, public, private, one-way, two-way, one-to-one,one-to-many. |
| **Online Safety:** Self Image and Identity(Education For A Connected World) |
| **2** | **Unit 6.5 - Programming A - Variables in Games** | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller partsUse sequence, selection, and repetition in programs; work with variables and various forms of input and outputUse logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programsSelect, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | I can define a ‘variable’ as something that is changeable.I can explain why a variable is used in a program.I can choose how to improve a game by using variables.I can design a project that builds on a given example.I can use my design to create a project.I can evaluate my project. | variable, change, name,value, set, design, event,algorithm, code, task,artwork, program, project,code, test, debug, improve,evaluate, share, assign,declare |
| **Online Safety:** Online Relationships(Education For A Connected World) |
| **3** | **Unit 6.4 - Data and Information - Spreadsheets** | Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | I can create a data set in a spreadsheet.I can build a data set in a spreadsheet.I can explain that formulas can be used to produce calculated data.I can apply formulas to data.I can create a spreadsheet to plan an event.I can choose suitable ways to present data. | data, collecting, table,structure, spreadsheet, cell,cell reference, data item,format, formula, calculation,spreadsheet, input, output,operation, range, duplicate,sigma, propose, question,data set, organised, chart,evaluate, results, sum,comparison, software, tools. |
| **Online Safety:** Online Reputation & Online Bullying(Education For A Connected World) |
| **4** | **Unit 6.2 - Creating Media – 3D Modelling** | Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and informationUse technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact | I can recognise that you can work in three dimensions on a computer.I can identify that digital 3D objects can be modified.I can recognise that objects can be combined in a 3D model.I can create a 3D model for a given purpose.I can plan my own 3D model.I can create my own digital 3D model. | TinkerCAD, 2D, 3D, shapes,select, move, perspective,view, handles, resize, lift,lower, recolour, rotate,duplicate, group, cylinder,cube, cuboid, sphere, cone,prism, pyramid, placeholder,hollow, choose, combine,construct, evaluate, modify. |
| **Online Safety: Managing Online Information**(Education For A Connected World) |
| **5** | **Unit 6.6 - Programming B - Sensing** | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller partsUse sequence, selection, and repetition in programs; work with variables and various forms of input and outputUse logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | I can create a program to run on a controllable device.I can explain that selection can control the flow of a program.I can update a variable with a user input.I can use a conditional statement to compare a variable to a value.I can design a project that uses inputs and outputs on a controllable device.I can develop a program to use inputs and outputs on a controllable device. | Micro:bit, MakeCode, input,process, output, flashing,USB, trace, selection,condition, if then else,variable, random, sensing,accelerometer, value,compass, direction,navigation, design, task,algorithm, step counter,plan, create, code, test,debug. |
| **Online Safety:** Health, Wellbeing and Lifestyle(Education For A Connected World) |
| **6** | **Unit 6.3 - Creating media – Web page creation** | Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour. | I can review an existing website and consider its structure.I can plan the features of a web page.I can consider the ownership and use of images (copyright).I can recognise the need to preview pages.I can outline the need for a navigation path.I can recognise the implications of linking to content owned by other people. | website, web page, browser,media, Hypertext MarkupLanguage (HTML), logo,layout, header, media,purpose, copyright, fair use,home page, preview,evaluate, device, GoogleSites, breadcrumb trail,navigation, hyperlink,subpage, evaluate,implication, external link,embed. |
| **Online Safety:** Privacy and Security & Copyright and Ownership(Education For A Connected World) |