| **Term** | **Computing Topic** | **Knowledge and understanding** | **What I will know and remember** | **Vocabulary** |
| --- | --- | --- | --- | --- |
| **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 5.1 - Computing systems and networks - Sharing information creating media** | 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 that computers can be connected together to form systems.  I can recognise the role of computer systems in our lives.  I can identify how to use a search engine.  I can describe how search engines select results.  I can explain how search results are ranked.  I can recognise why the order of results is important, and to whom. | **system**, connection, digital,  **input\*, process\*, storage,**  **output\***, search, search  engine, **refine**, **index, bot**,  ordering, links, algorithm,  **search engine optimisation**  **(SEO)**, **web crawler,** content  creator, **selection, ranking.** |
| **Online Safety:** Self Image and Identity  (Education For A Connected World) | | | | |
| **2** | **Programming A - Selection in Physical Computing (Musical Microbit unit)** | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. | I can read and interpret a range of algorithms.  I can write a program to play music. I can follow and modify algorithms. I can write, test and debug programs to play different notes. I can evaluate the micro:bit as a music-making device. | **Selection, condition, microcontroller**, micro:bit, algorithm, repetition, input, output, USB,  **components**, connection,  **infinite loop\***, component, motor,  , count-controlled  loop,  switch, LED, crocodile clips, connect,  battery box, program,  condition, action, debug,  circuit, power, cell, buzzer |
| **Online Safety:** Online Relationships  (Education For A Connected World) | | | | |
| **3** | **Unit 5.4 - Data and Information - Flat File Databases** | 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 use a form to record information.  I can compare paper and computer-based databases.  I can outline how you can answer questions by grouping and then sorting data.  I can explain that tools can be used to select specific data.  I can explain that computer programs can be used to compare data visually.  I can use a real-world database to answer questions. | database, data, information,  **record, field**, sort, order,  group, search, value, **criteria**,  graph, chart, axis, compare,  **filter**, presentation. |
| **Online Safety:** Online Reputation & Online Bullying  (Education For A Connected World) | | | | |
| **4** | **Unit 5.2 - Creating media – Vector drawing** | 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 identify that drawing tools can be used to produce different outcomes.  I can create a vector drawing by combining shapes.  I can use tools to achieve a desired effect.  I can recognise that vector drawings consist of layers.  I can group objects to make them easier to work with.  I can apply what I have learned about vector drawings. | **vector,** drawing tools, object,  toolbar, **vector drawing**,  move, resize, colour, rotate,  duplicate/copy, zoom,  select, **align**, modify, **layers**,  order, copy, paste, group,  ungroup, reuse, reflection |
| **Online Safety:** Managing Online Information  (Education For A Connected World) | | | | |
| **5** | **Unit 5.6 - Programming B - Selection in Quizzes** | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. | I can explain how selection is used in computer programs.  I can explore how a conditional statement connects a condition to an outcome. I can explain how selection directs the flow of a program.  I can design a program that uses selection.  I can create a program that uses selection.  I can evaluate my program. | **Selection**, condition, true,  false, **count-controlled loop**,  outcomes, **conditional**  **statement**, algorithm,  program, debug, question,  answer, task, design, input,  **implement**, test, run, setup,  operator |
| **Online Safety:** Health, Wellbeing and Lifestyle  (Education For A Connected World) | | | | |
| **6** | **Unit 5.3 - Creating media – Video Production** | 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 explain what makes a video effective.  I can use a digital device to record video.  I can capture video using a range of techniques.  I can create a storyboard.  I can identify that video can be improved through reshooting and editing.  I can consider the impact of the choices made when making and sharing a video. | video, audio, camera, talking  head, **panning**, close up,  video camera, microphone,  **lens, mid-range, long shot**,  moving subject, side by side,  **angle (high, low, normal),**  **static**, zoom, pan, tilt,  storyboard, filming, review,  import, **split, trim, clip**, edit,  reshoot, delete, reorder,  **export**, evaluate, share. |
| **Online Safety:** Privacy and Security & Copyright and Ownership  (Education For A Connected World) | | | | |