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| **Year Group** |  | **Autumn** | **Spring** | | **Summer**  **Enrichment Opportunities** | |
|  | **Drivers** | **A Moment in Time**  **History & Music** | **Adrift Project**  **SMSC, Values** | **STEM**  **Science, DT, Computing** | **RE, PE** | **Conservation**  **Geography & Art** |
| **EYFS** |  | In Computing, we learn about computers and modern technology, and how we use them. When we are in school, technology is all around us! We explore Laptops, Whiteboards, Tablets and IPads, Electronic Toys, calculators and bee-bots. We ask what does this do? How does it work? What happens when I press…? What can I use this for?  **Basic coding**  We start to look at coding. This is when we give instructions to a computer to do a task. When coding we have to use a language that the computer can understand. This is called code. We can use coding to get Bee-bots to do basic tasks (e.g. move forwards, backwards or to the side). We can also use Human Beebots (our friends!) and make up codes for them to follow! | | | | |
| **1** | **Ongoing/revisits** | Typing skills & Vocabulary | Typing skills & Vocabulary | | Typing skills & Vocabulary  Cultural Capital- New: Bill Gates | |
| **Computer Science** | **Control & Programming**  Sequencing instructions using  Beebot and Codeapillar | **Control & Programming**  Code Studio Course A  Sequencing and debugging using  Alex the Robot | | **Control & Programming**  Code Studio Course A  Using multiple commands to control a device using Blue bot | |
| **Digital literacy** | **Research:**  Victorians via QR code (His)  Materials- BBC website (Sci)  **Online Communication and eSafety:** Friendship and responsibility  Keeping personal information safe  Watching videos safely online  **Modelling and Simulations**:  Grouping materials (Sci) | **Research:**  Identify plants (Sci)  Online Communication and eSafety:  Sharing information safely- Upload to Seesaw  How do we ‘travel’ safely online  What do we share online?  **Modelling and Simulations**:  Growing simulation (Sci)  Build own weather forecast (Geog) | | **Research:**  Human Body using encyclopaedia online (Sci)  Habitats and environment- BBC (sci)  **Online Communication and eSafety:**  Balancing screen time  Asking for help  **Modelling and Simulations**:  Animals in local habitat simulation (Sci) | |
| **Information Technology** | **Word Processing and DTP:**  Toys pic collage (His)  Traditional tales labels (Eng)  **Multimedia:**  Animate traditional tale (Eng) | **Word Processing and DTP:**  Using a keyboard to enter own writing (Eng)  **Multimedia:**  Frame and filter images of Queen (His)  Create video as the Queen (Eng)  **Data Handling:**  Create pictogram (Sci & Ma) | | **Word Processing and DTP:**  Interactive presentation about Bill Gates  **Multimedia:**  Animations using puppets (Eng)  **Data Handling**  Bar graphs about recycling (Ma) | |

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| **2** | **Ongoing/revisits** | Typing skills & Vocabulary | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates  New: Dame Wendy Hall | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates  New: Dame Wendy Hall |
| **Computer Science** | **Control & Programming**  Code Studio Course B  Program Beebots: holiday destinations | **Control & Programming**  Code Studio Course B  Use coding to draw a shape (Ma) | **Control & Programming**  Code Studio Course B  Create a themed habitat using Scratch Jnr (Sci) |
| **Digital literacy** | **Research:**  BBC Science: What do humans need to stay healthy (Sci)  Search and save images online  **Online Communication and eSafety:**  Sharing images online  Privacy Settings  Online bullying  **Modelling and Simulations**:  Animals in local habitat simulation | **Research:**  Search for information about Dame Wendy Hall  BBC Science: Which material do we use (Sci)  **Online Communication and eSafety:**  How technology makes us feel  Pause and think online ‘good digital citizens’  Know what an email is  **Modelling and Simulations**:  Growing simulation for plant (Sci) | **Research:**  BBC Science: Plants  **Online Communication and eSafety:**  Playing online games safely  Identifying suitable games  Know how to report incidents  **Modelling and Simulations**:  Great Fire of London Simulation (His) |
| **Information Technology** | **Word Processing and DTP:**  Poster using Pic Collage (His)  Word process own writing (Eng)  **Multimedia:**  Animate ‘The Beatles’ to talk (His & Mus)  **Data Handling:**  Search animal database (Sci) | **Word Processing and DTP:**  Create timeline of flight to space travel (His)  Create an ebook (Eng)  **Multimedia:**  Create an animation of the moon (Sci)  Create a film to narrate STEM project  **Data Handling:**  Use a plant identifier (Sci)  Create a simple pictogram (Sci or Ma) | **Word Processing and DTP:**  BBC dancemat typing Level 1  Word process English or topic  **Multimedia:**  Film about natural disasters (His)  Digital art to draw fire (Art)  Music: melody and pattern (Mus)  **Data Handling:**  Bar graph of plant growth (Sci) |

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| **3** | **Ongoing/revisits** | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  New: | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  New: Konrad Zuse | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  New: Konrad Zuse |
| **Computer Science** | **Control & Programming**  Code Studio Course C  Lego Mindstorms  Scratch Junior | **Control & Programming**  Code Studio Course C  Investigate algorithms to create a recipe | **Control & Programming**  Code Studio Course C  Program repeating patterns to solve problems using Tynker |
| **Digital literacy** | **Research:**  Comparing websites  BBC Bitesize: Rocks and Soils (Sci)  **Online Communication and eSafety:**  Upload work onto Google Classroom  eCadets  Putting a stop to meanness online  Controlling device time  **Modelling and Simulations**:  Discover interactive archaeological sites from the ancient past (His) | **Research:**  BBC Bitesize: Light and Shadows (Sci)  BBC Bitesize: Forces and Motion (Sci)  Develop accuracy of key search questions to learn about Konrad Zuse  **Online Communication and eSafety:**  Revisit keeping personal information private  Acceptable use of others’ work  **Modelling and Simulations**:  Force simulations (Sci)  Interactive mummification (His)  Explore the Nile or search for volcanoes on Google Earth (Geog) | **Research:**  Research to find specific information about conservation (Geog)  **Online Communication and eSafety:**  eCadets  Who are we connected to online?  How social networks can be abused  **Modelling and Simulations**:  Explore key places using Google Earth voyager (Geog) |
| **Information Technology** | **Word Processing and DTP:**  Create digital art about cave painting (Art)  Poster using pic collage about rocks (Geog)  **Multimedia:**  Combine and layer music using Incredibox (Mus)  **Data Handling:**  Introduction to spreadsheets (Ma) | **Word Processing and DTP:**  Timeline of events in Egypt (His)  Create a formal document adding layout and images (Eng)  **Multimedia:**  Interactive presentation about Egypt  Create a video recipe guide using Shadow Puppet Edu (DT)  **Data Handling:**  Light datalogging around school and create a graph (Sci)  Begin to use spreadsheet for data on Ancient Egyptian Gods (His) | **Word Processing and DTP:**  Presentation about conservation (Eng)  **Multimedia:**  Create a comic strip about a Greek myth (Eng)  Create own mosaic designs (Art)  **Data Handling:**  Branching database: Classify animals (Sci) |
| **4** | **Ongoing/revisits** | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad Zuse  New: | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad Zuse  New: Tim Berners-Lee | Typing skills & Vocabulary  Recap: Bill Gates, Dame Wendy Hall  Konrad Zuse  New: Tim Berners-Lee | |
| **Computer Science** | **Control & Programming**  Code Studio Level D  Develop sequencing skills with El Chavo (level 4) | **Control & Programming**  Code Studio Level D  Program a Viking game in Scratch | **Control & Programming**  Code Studio Level D  Draw shapes and patterns using Hopscotch |
| **Digital literacy** | **Research:**  Recap and develop key search questions to research Romans in Chester (His)  BBC Bitesize: States of Matter (Sci)  **Online Communication and eSafety:**  Download and upload to Google Classroom  The power of words  Online responsibility  Digital pledge  **Modelling and Simulations**:  Use Google Earth to study Bromborough (Geog) | **Research:**  BBC Bitesize: Electricity  BBC Bitesize: Sounds and Vibrations  Advanced search tools for images  Research about Tim Berners-Lee to create multimedia video presentation  **Online Communication and eSafety:**  Upload and download content to Google Classroom  eCadets  Digital Citizen pledge  **Modelling and Simulations**:  Electricity simulation (Sci)  Design a game using Sketch Nation about Anglo Saxons | **Research:**  Compare websites for usefulness  BBC Bitesize: Animal Classification  BBC Bitesize: Balanced Diet  **Online Communication and eSafety:**  Upload and download to Google Classroom  eCadets  Secure Passwords  Google Forms quiz  **Modelling and Simulations**:  Health simulations (Sci) |
| **Information Technology** | **Word Processing and DTP:**  Present writing to develop word processing skills (Eng)  **Multimedia:**  Make a film with music using a gallery of photos taken and edited  Create Roman mosaic design (Art)  **Data Handling:**  Use shopping list spreadsheet to stick to a budget (Ma)  Present Science topic data as a graph (Sci) | **Word Processing and DTP:**  Comic strip story linked to Vikings  Use research of Time Berners Lee to present a non-chronological report  Made an e book  **Multimedia:**  Showcase STEMterprise using Adobe Spark Video App  Create music using loops to build up layers to play on STEM showcase (above)  **Data Handling:**  Sound datalogging and plot results onto a graph (Sci & Ma) | **Word Processing and DTP:**  Word process a persuasive letter about Crime and Punishment  **Multimedia:**  Stop animation about digestive system using iMotion (did solida, liquids and gases) |

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| **5** | **Ongoing/revisits** | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  Konrad Zuse, Tim Berners-Lee  New: | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad Zuse, Tim Berners-Lee  New: Ada Lovelace & Charles Babbage | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad Zuse, Tim Berners-Lee  New: Ada Lovelace & Charles Babbage | |
| **Computer Science** | **Control & Programming**  Code Studio Level E  Create polygons using Scratch | **Control & Programming**  Code Studio Level E  Make a drum machine using Scratch  Create an interactive model of the solar system (Sci) | **Control & Programming**  Code Studio Level E  Use swift coding to move from block based to script-based code |
| **Digital literacy** | **Research:**  BBC Bitesize: Changing Materials (Sci)  Present research found about Tudors in Padlet (His)  **Online Communication and eSafety:**  eCadets lesson  Access and use Google Classroom  Private and personal information  Being an upstander against cyberbullying  **Modelling and Simulations**:  Reversible and irreversible changes simulation (Sci)  Materials: Friction Simulation (Sci)  Solids and Liquids (Sci)  Explore river from its source to its mouth using Google Earth (Geog) | **Research:**  Explore information from 3 websites about Ada Lovelace and Charles Babbage  BBC Bitesize: Earth and Space (Sci)  BBC Bitesize: Forces and Motion (Sci)  **Online Communication and eSafety:**  eCadets lesson  Access and use Google Classroom  Safe online gaming  **Modelling and Simulations**:  Forces simulation  Space Augmented Reality | **Research:**  Use large database to search for Boolean searches linked to topic  BBC Bitesize: Life Cycles and Reproduction (Sci)  **Online Communication and eSafety:**  eCadets lesson  Access and use Google Classroom  Informed media choices  Digital compass  **Modelling and Simulations**:  Google Earth Tour (Geog)  Create a computer game using Sketch Nation linked to conservation |
| **Information Technology** | **Word Processing and DTP:**  Use word processing to present a newspaper report from Tudor Times (Eng)  **Multimedia:**  Record animation to create a movie  Create background music to use in movie (Mus) | **Word Processing and DTP:**  Create a poster to advertise their STEM project using Adobe Spark  **Multimedia:**  Sequence events on a timeline during Victorian times adding hyperlinks (His)  Create a film advertising STEM product (DT)  **Data Handling:**  Record continuous data linked to forces in Science Journal app  Create a collaborative database of planets (Sci) | **Word Processing and DTP:**  Google Earth Tour- add information to each location (Eng)  Hyperlinked presentation about Conservation  **Multimedia:**  How architects use computers to design buildings (DT)  Create a movie trailer with imovie  **Data Handling:**  Develop own online quiz about conservation and present data (Ma) |
| **6** | **Ongoing/revisits** | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  Konrad Zuse, Tim Berners-Lee, Ada Lovelace and Charles Babbage  New: | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  Konrad Zuse, Tim Berners-Lee, Ada Lovelace and Charles Babbage  New: Alan Turing and Hedy Lamaar | Typing skills & Vocabulary  Cultural Capital- Recap: Bill Gates, Dame Wendy Hall  Konrad Zuse, Tim Berners-Lee, Ada Lovelace and Charles Babbage  New: Alan Turing and Hedy Lamaar | |
| **Computer Science** | **Control & Programming**  Code Studio Level F  Create own Scratch game | **Control & Programming**  Code Studio Level F  Design a space invaders game  Solving problems | **Control & Programming**  Code Studio Level F  Swift script coding  Code Combat: Python  Binary |
| **Digital literacy** | **Research:**  Search accuracy and Boolean searches  BBC bitesize: Circulatory system, classification and life cycles (Sci)  **Online Communication and eSafety:**  eCadets lesson  Access and use Google Classroom  Planning for media balance  Cyber bullying  **Modelling and Simulations**:  Digital models of human body or  3d modelling of Mayan temples/jewellery (His) | **Research:**  Use a range of search engines to research Alan Turing and Hedy Lamaar WW2 (His)  BBC Bitesize videos and activities for Light & Dark and adaptation and inheritance (Sci)  **Online Communication and eSafety:**  eCadets  Share and use content on Google Classroom  Digital friendship  Beyond Gender Stereotypes  **Modelling and Simulations**:  Google Earth: Using different scales (Geog)  Create a WW2 game using Sketch Nation | **Research:**  BBC Biteszie videos and activities for Electricity (Sci)  Evaluate internet resources  Plausibility  **Online Communication and e**  **Safety:**  eCadets  Share and use content on Google Classroom  What is the ‘curiosity gap’?  Online news  **Modelling and Simulations**:  Electricity simulation (Sci)  Energy simulations (Sci)  3D design to create virtual museum |
| **Information Technology** | **Word Processing and DTP:**  Present own writing and share online (Eng)  Simulate a website  **Multimedia:**  Stop frame animation of food chains (Sci)  Manipulate music digitally (Music)  **Data Handling:**  Datalogging of heart rate and present in a graph (Sci) | **Word Processing and DTP:**  Sequence events in a timeline for WW2 (His)  Poster to advertise STEM product (DT)  **Multimedia:**  Movie trailer (Eng)  **Data Handling:**  Collaborative database linked to WW2 (His)  Data logging: light (Sci) | **Word Processing and DTP:**  SPAG revision game using TinyTap (Eng)  Conservation presentation  **Multimedia:**  Create digital art (Art)  Create musical composition for use in greens screen project (Mus)  News report using green screen about WW2 (His and Eng)  **Data Handling:**  Spreadsheets (Ma) |