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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 & VocabularyCultural Capital- New: Bill Gates |
| **Computer Science** | **Control & Programming**Sequencing instructions usingBeebot and Codeapillar | **Control & Programming**Code Studio Course ASequencing and debugging usingAlex the Robot | **Control & Programming**Code Studio Course AUsing 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 responsibilityKeeping 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 SeesawHow do we ‘travel’ safely onlineWhat 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 timeAsking 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 & VocabularyCultural Capital- Recap: Bill GatesNew: Dame Wendy Hall | Typing skills & VocabularyCultural Capital- Recap: Bill GatesNew: Dame Wendy Hall |
| **Computer Science** | **Control & Programming**Code Studio Course BProgram Beebots: holiday destinations | **Control & Programming**Code Studio Course BUse coding to draw a shape (Ma) | **Control & Programming**Code Studio Course BCreate 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 onlinePrivacy SettingsOnline bullying**Modelling and Simulations**:Animals in local habitat simulation | **Research:**Search for information about Dame Wendy HallBBC Science: Which material do we use (Sci)**Online Communication and eSafety:**How technology makes us feelPause 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 safelyIdentifying suitable gamesKnow 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 1Word 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 & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallNew: | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallNew: Konrad Zuse | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallNew: Konrad Zuse |
| **Computer Science** | **Control & Programming**Code Studio Course CLego MindstormsScratch Junior | **Control & Programming**Code Studio Course CInvestigate algorithms to create a recipe | **Control & Programming**Code Studio Course CProgram repeating patterns to solve problems using Tynker |
| **Digital literacy** | **Research:**Comparing websitesBBC Bitesize: Rocks and Soils (Sci)**Online Communication and eSafety:**Upload work onto Google ClassroomeCadetsPutting a stop to meanness onlineControlling 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 privateAcceptable 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:**eCadetsWho 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 EgyptCreate 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 & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad ZuseNew: | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad ZuseNew: Tim Berners-Lee | Typing skills & VocabularyRecap: Bill Gates, Dame Wendy HallKonrad ZuseNew: Tim Berners-Lee |
| **Computer Science** | **Control & Programming**Code Studio Level DDevelop sequencing skills with El Chavo (level 4) | **Control & Programming**Code Studio Level DProgram a Viking game in Scratch | **Control & Programming**Code Studio Level DDraw 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 ClassroomThe power of wordsOnline responsibilityDigital pledge**Modelling and Simulations**:Use Google Earth to study Bromborough (Geog) | **Research:**BBC Bitesize: ElectricityBBC Bitesize: Sounds and VibrationsAdvanced search tools for imagesResearch about Tim Berners-Lee to create multimedia video presentation**Online Communication and eSafety:**Upload and download content to Google ClassroomeCadetsDigital Citizen pledge**Modelling and Simulations**:Electricity simulation (Sci)Design a game using Sketch Nation about Anglo Saxons | **Research:**Compare websites for usefulnessBBC Bitesize: Animal ClassificationBBC Bitesize: Balanced Diet**Online Communication and eSafety:**Upload and download to Google ClassroomeCadetsSecure PasswordsGoogle 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 editedCreate 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 VikingsUse research of Time Berners Lee to present a non-chronological reportMade an e book**Multimedia:**Showcase STEMterprise using Adobe Spark Video AppCreate 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 & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallKonrad Zuse, Tim Berners-LeeNew: | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad Zuse, Tim Berners-LeeNew: Ada Lovelace & Charles Babbage | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy Hall, Konrad Zuse, Tim Berners-LeeNew: Ada Lovelace & Charles Babbage |
| **Computer Science** | **Control & Programming**Code Studio Level ECreate polygons using Scratch | **Control & Programming**Code Studio Level EMake a drum machine using ScratchCreate an interactive model of the solar system (Sci) | **Control & Programming**Code Studio Level EUse 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 lessonAccess and use Google ClassroomPrivate and personal informationBeing 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 BabbageBBC Bitesize: Earth and Space (Sci)BBC Bitesize: Forces and Motion (Sci)**Online Communication and eSafety:**eCadets lessonAccess and use Google ClassroomSafe online gaming**Modelling and Simulations**:Forces simulationSpace Augmented Reality | **Research:**Use large database to search for Boolean searches linked to topicBBC Bitesize: Life Cycles and Reproduction (Sci)**Online Communication and eSafety:**eCadets lessonAccess and use Google ClassroomInformed media choicesDigital 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 movieCreate 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 appCreate 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 & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallKonrad Zuse, Tim Berners-Lee, Ada Lovelace and Charles BabbageNew: | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallKonrad Zuse, Tim Berners-Lee, Ada Lovelace and Charles BabbageNew: Alan Turing and Hedy Lamaar | Typing skills & VocabularyCultural Capital- Recap: Bill Gates, Dame Wendy HallKonrad Zuse, Tim Berners-Lee, Ada Lovelace and Charles BabbageNew: Alan Turing and Hedy Lamaar |
| **Computer Science** | **Control & Programming**Code Studio Level FCreate own Scratch game | **Control & Programming**Code Studio Level FDesign a space invaders gameSolving problems | **Control & Programming**Code Studio Level FSwift script codingCode Combat: PythonBinary |
| **Digital literacy** | **Research:**Search accuracy and Boolean searchesBBC bitesize: Circulatory system, classification and life cycles (Sci)**Online Communication and eSafety:**eCadets lessonAccess and use Google ClassroomPlanning for media balanceCyber bullying**Modelling and Simulations**:Digital models of human body or3d 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:**eCadetsShare and use content on Google ClassroomDigital friendshipBeyond 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 resourcesPlausibility**Online Communication and e****Safety:**eCadetsShare and use content on Google ClassroomWhat 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) |