

| Computing          |   |  |                                    |  |  |  |
|--------------------|---|--|------------------------------------|--|--|--|
| Devas              | Bannerman                                     | Porteous                               | Borton                             |  |  |  |
| All about me!      | Cycle A Online Safety                         | Cycle A Online Safety and Coding       | Cycle A Online Safety and Blogging |  |  |  |
| Let's Celebrate    | Maze Explorers and Questioning                | Coding and Spreadsheets                | Coding                             |  |  |  |
| Polar Regions      | Animated Story Books                          | Writing for different audiences        | Spreadsheets                       |  |  |  |
| Growing            | ,   |  | ·                                  |  |  |  |
| London             | Making Music                                  | Logo and Animation                     | Word Processing                    |  |  |  |
| Beside the Seaside | Spreadsheets and Pictograms                   | Effective search and Presenting        | Text Adventures and Networks       |  |  |  |
|                    | Presenting Ideas                              | Hardware Investigators ad Making Music | Quizzing                           |  |  |  |
|                    | Cycle B Online Safety and Effective Searching | Cycle B Online Safety and Coding       | Cycle B Coding                     |  |  |  |
|                    | Lego Builders and Technology outside school   | Coding and Spreadsheets                | Online safety and Databases        |  |  |  |
|                    | Grouping and sorting and Creating pictures    | Touch Typing                           | Spreadsheets                       |  |  |  |
|                    | Spreadsheets                                  | Email                                  | Game Creator                       |  |  |  |
|                    | Coding  | Branching databases                    | 3D Modelling                       |  |  |  |
|                    |   | Simulations and Graphing               | Concept Maps                       |  |  |  |



# Compassion, Joy, Perseverance, Respect 'Live life in all its fullness' John 10:10

## **Progression of Skills in Computing**

| Computer Science  |   |  |  |  |   |   |  |
|---|---|--|--|--|---|---|--|
| Devas   | Bannerman   |  | Porteous   |  | Borton  |   |  |
| 30-50 months  | Year 1  | Year 2   | Year 3   | Year 4   | Year 5  | Year 6  |  |
| I can make a control toy move.  With support I can programme a                                      | I can work out what is<br>wrong with a simple<br>algorithm when the steps | I can design a simple program using 2Code that achieves a purpose. | I can make a real-life<br>situation into an algorithm<br>for a program.            | I can design an algorithm that models a real-life situation. | I can make more complex<br>real-life problems into<br>algorithms for a program.           | I can turn a complex programming task into an algorithm.        |  |
| control toy to move for a particular  | are out of order.   |  |  |  |   |   |  |
| purpose.  | I can make logical attempts<br>to fix my code if it isn't                 | I can find and correct some errors in my program.                  | I can design an algorithm<br>carefully, thinking about<br>what I want it to do and | I can use repetition in my code.                             | I can test and debug my programs as I work.   | I can identify the important aspects of a programming task.     |  |
| I can say what will happen when I   | •   | Language will be seen  |  | Lann   |   | lask.   |  |
| press/swipe on a game using an IPad or whiteboard.  | working properly.  I can make good guesses of                             | I can say what will happen in a program.                           | how I can turn it into code.  I can identify an error in my                        | I can use: - Timers to create repetition effects             | I can use sequence,<br>selection, repetition and<br>some other coding                     | I can test and debug my<br>program as I work on it and          |  |
| <b>40-60+ months</b> I can use a range of control toys and  | what is going to happen in a program.                                     | I can write a cause and effect sentence of what will               | program and fix it.  | <ul><li>Selection</li><li>Variables and know</li></ul>       | structures in my code.  | use logical methods to identify a cause of a bug.               |  |
| devices.  |   | happen in a program.   | I can experiment with timers to achieve repetition                                 | how to change the value of variables                         | I can organise my code carefully for example,   | I can identify a specific line of                               |  |
| I understand that goals can be achieved by following a sequence of steps.                           |   |  | effects in my program.  I can read programs with                                   | The user inputs and output features within my program        | naming variables and using<br>tables. I know this will help<br>me debug more efficiently. | code that is causing a problem in my program and attempt a fix. |  |
| I can follow symbol sequence  |   |  | several steps and predict what it will do.   | I can use different methods                                  | I can use logical methods to  | I can translate algorithms that                                 |  |
| algorithms. E.G. In PE jump, step,<br>hop etc.  |   |  | I can design and code a program that follows a                                     | to identify errors in my code.                               | identify the case of any bug<br>with support to identify the<br>specific line of code.    | include sequence, selection and repetition into code.           |  |
| I can programme a control toy one instruction at a time and clear it at                             |   |  | simple sequence.   | I can read programs that contain several steps and           | I know the importance of  | I can use inputs and outputs within my coded programs           |  |
| the end.  |   |  | I can use email such as<br>2Email to respond to others                             | predict the outcomes.  | computer networks and how they help solves  | such as sound, movement and buttons.                            |  |
| I can recognise that there is a problem and say what it is.   |   |  | appropriately and attach files.  | I understand that network and communication                  | problems and enhances communication.  | I can explain the different                                     |  |
| I can predict what a programme will do next.  |   |  |  | in many different devices<br>which allow them to join        | I recognise the main dangers that can be made   | between the Internet and the World Wide Web.                    |  |
|   |   |  |  | the internet.  | via computer networks.  | I can explain what a WAN and                                    |  |
| <b>ELG PSED; Self-Regulation:</b> Give focused  |   |  |  | I can recognise the main                                     |   | LAN is and describe the process of how access to the            |  |
| attention to what the teacher says, responding appropriately even when                              |   |  |  | component parts of hardware which allow                      |   | internet in school is possible.                                 |  |
| engaged in activity, and show an ability to follow instructions involving several ideas or actions. |   |  |  | computers to join and form a network.                        |   |   |  |



## Church of England Primary School Compassion, Joy, Perseverance, Respect 'Live life in all its fullness' John 10:10

### **Progression of Skills in Computing**

| Information Technology   |   |  |          |  |   |  |  |
|--|---|--|----------|--|---|--|--|
| Devas  | Bannerman   |  | Porteous |  | Borton  |  |  |
| Jevas  30-50 months I can use technology appropriately through role-play.  I can recognise some technology that is used at home and school. I can name and use some technology with developing control.  40-60+ months I can select and use technology for a particular purpose. I can name key features such as a keyboard and mouse and begin to use them with developing control.  I can use a digital device to create and store content. E.G. taking a photo.  ELG  Expressive Arts and Design; Creating with materials: - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function Share their creations, explaining the process they have used. | Year 1 I can sort sound, pictures and text. I can add sound, pictures and text to a program. I can change content on a file such as text, sound and images. I can name my work. I can save my work. I can find my work. |  | 1        |  | Year 5 I can search precisely when using a search engine. I can explain in detail how accurate, safe and reliable the content is on a webpage. I can make appropriate improvements to digital work I have created. I can comment on how successful a digital solution is that I have created. I can work collaboratively with others creating solutions to problems using appropriate software. I can use collaborative modes to work with others and share it. | Year 6 I can use filters when searching for digital content. I can explain in detail how accurate and reliable a webpage and its content is. I can compare a range of digital content sources and rate them in terms of content quality and accuracy. I can consider the intended audience carefully when I design and make digital content. I can design and create my own online blogs. I can use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. |  |



# Compassion, Joy, Perseverance, Respect 'Live life in all its fullness' John 10:10 Progression of Skills in Computing

| Digital Literacy   |  |   |   |  |  |  |  |  |
|--|--|---|---|--|--|--|--|--|
|  |  |   |   |  |  |  |  |  |
| 30-50 months I can recognise some technology that is used in the home and school. I can use technology appropriately through role-play. I can speak to an adult about what I have seen. I can say if something I find on the internet makes me feel scared. 40-60+ months I can select and use technology for a particular purpose. I can access and use simple activities using technology with increasing control. I can name some uses of technology outside of school. I know that some information should be kept private. I know what to do if I see things that upset me online. ELG Understanding the world; Past and Present: Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. PSED; Self-Regulation: Show an understanding of their own feelings | Year 1 I can say what technology is. I can say what examples of technology are in school. I can say what examples of technology are at home. I understand the technology in my environment is a mixture of old and new technology. I can keep my login information safe. I can save my work in a safe place. | Year 2 I can find information I need using a search engine. I know the consequences of not searching online safety. I can share work and communicate electronically. I can report unkind behaviour and things that upset me online, to a trusted adult. I can see where technology is used at school. I understand that my creations, need similar skills to the adult world. | Year 3 I can create a secure password. I can explain the importance of having a secure password and not sharing it with others. I can explain the negative consequences of not keeping passwords safe and secure. I understand the importance of keeping safe online and behaving respectfully. I can use communication tools respectfully. I can report unacceptable content and contact online in more than one way to a trusted adult. | Year 4 I have a good understanding of the online safety rules we learn at school. I can demonstrate how to use different online technologies safely. I can demonstrate how to use a few different online services safely. I know I have a right to privacy both on and offline. I recognise that my wellbeing can be affected by how I use technology. I can report with ease any concerns with content and contact online and know immediate strategies to keep safe. | Year 5 I have a secure knowledge of online safety rules taught at school. I can demonstrate the safe and respectful use of different online technologies and online services. I always relate appropriate online behaviour to my right to have personal privacy. I know how to not let my mental wellbeing or others be affected by use of online technologies and services. I can explain what personal information is and know strategies for keeping safe. I can use the most appropriate form of online communication. | Year 6 I can demonstrate safe and respectful use of a range of different technologies and online services. I can identify more discrete inappropriate behaviours online. I can use critical thinking to help me stay safe online. I know the value of protecting my privacy and others online. |  |  |