**Computing Long Term Plan - NCCE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Autumn**  **Autumn 1 Systems and Networks**  **Autumn 2 Media** | **Spring**  **Spring 1 Programming**  **Spring 2 Data and Information** | **Summer**  **Summer 1 Media**  **Summer 2 Programming3** |
| **Rec** | **Data Handling**  Responding to photographs or digital media showing shared events/familiar people or places | **Information Literacy**  Uses technologies, with support, to find out more about the world around them.  Recognises that a range of technology is used in places such as homes and schools. Selects and uses technology for particular purposes. | **Media**  Uses and responds to real or improvised technological resources.  Uses technologies to share experiences with others and share experiences of using technology.  Uses technologies to enhance, change or recreate within a learning experience.  Captures and documents a sequence of events or experiences using ICT.  Finds out about and uses a range of technology. Selects appropriate applications that support an identified need. |
| **Computer Science**  Understanding that the action of pressing a button/lifting flaps and operating simple mechanisms will result in a particular reaction. | **Media**  Uses and responds to real or improvised technological resources.  Uses technologies to share experiences with others and share experiences of using technology.  Captures and documents a sequence of events or experiences using ICT. |
| **Year 1** | **Technology Around Us**   1. Technology in our classroom 2. Using computer technology 3. Developing Mouse skills 4. Using a keyboard 5. Developing keyboard skills 6. Using a computer responsibly | **Moving a Robot**  1.Buttons  2. Directions  3. Forwards and backwards  4 directions  5. Getting there  6. Routes | **Digital Writing**  **1**.Exploring the keyboard  2. Adding and removing text  3. Exploring the toolbar  4. Making changes to texts  5. Explaining my choices  6. Pencil or keyboard |
| **Digital Painting**   1. **How can we paint using** computers 2. Using shapes and lines 3. Making careful choices 4. Why did I choose that? 5. Painting by myself 6. Comparing computer art and painting, | **Grouping Data**  **1.** Label and match  2. group and count  3. Describe an object  4. Making different groups  5. Comparing Groups  6. Answering questions | **Programming Animations**   1. Comparing tools 2. Joining blocks 3. Make a change 4. Adding sprites 5. Project design 6. Following my design |
| **Year 2** | **IT Around Us**   1. What is IT 2. IT in school 3. IT in the world 4. The benefits of IT 5. Using IT safely 6. Using IT in different ways | **Robot Algorithms**   1. Giving instructions 2. Same but different 3. Making Predictions 4. Mats and routes 5. Algorithm design 6. Debugging | **Digital Music**   1. How music makes us feel 2. Rhythms and patterns 3. How music can be used 4. Notes and tempo 5. Creating digital Music 6. Reviewing and editing music |
| **Digital Photography**   1. Taking photographs 2. Landscape or portrait 3. What makes a good photo 4. Lighting 5. Effects 6. Is it real? | **Pictograms**   1. Counting and comparing 2. Enter the data 3. Creating pictograms 4. What is an attribute 5. Comparing people 6. Presenting Information | **Programming Quizzes**   1. Scratch Junior recap 2. Outcomes 3. Using a design 4. Changing a design 5. Designing and creating a program 6. Evaluating |
| **Year 3** | **Connecting Computers**   1. How does a digital devicework 2. What parts make up a digital device 3. How do digital devices help us 4. How am I connected 5. How are computers connected 6. What does our school network look like | **Sequencing Sounds**   1. Introduction to scratch 2. Programming sprites 3. Sequences 4. Order and commands 5. Looking good 6. Making and instrument | **Desktop Publishing**   1. Words and pictures 2. Can you edit it 3. Great template 4. Becoming a designer 5. Lay it out 6. Why desktop publishing? |
| **Stop-frame animations**   1. Can a picture move? 2. Frame by Frame 3. What’s the story 4. Picture perfect 5. Evaluate and make it great Light Camera Action | **Branching Databases**   1. Yes / No questions 2. Making groups 3. Creating a branching database 4. Structuring a branching database 5. Planning a branching database 6. 2 ways of presenting information | **Events and Actions in Programs**   1. Moving a sprite 2. Maze movement 3. Drawing lines 4. Adding features 5. Debugging movements 6. Making a project |
| **Year 4** | **Computer Systems and the Internet**   1. Connecting networks 2. What is the internet made of? 3. Sharing information 4. What is a website? 5. Who owns the web? 6. Can I believe what I read? | **Repetition in Shapes**   1. Programming a screen turtle 2. Programming letters 3. Patterns and repeats 4. Using loops to create shapes 5. Breaking things down 6. Creating a program | **Photo Editing**   1. Changing digital images 2. Recolouring 3. Cloning 4. Combining 5. Creating 6. Evaluating |
| **Audio Production**   1. Recording sound 2. Editing audio 3. Planning a podcast 4. Creating a podcast 5. Behind the scenes 6. Evaluating podcasts | **Data Logging**   1. Answering questions 2. Data collection 3. Logging 4. Analysing data 5. Data for answers 6. Answering my question | **Repetition in Games**   1. Using loops to create shapes 2. Different loops 3. Animate your name 4. Modifying a game 5. Designing a game 6. Creating our games |
| **Year 5** | **Computer Systems and Networks**   1. Systems 2. Computer systems and us 3. Searching the web 4. Selecting search results 5. How search results are ranked 6. How are searches influenced | **Selection in Physical Computing**   1. Connecting crumbles 2. Combining output components 3. Controlling with conditions 4. Starting with selection 5. Drawing designs 6. Writing and testing algorithms | **Introduction to vecto graphics**   1. The drawing tools 2. Creating images 3. Making effective drawings 4. Layers and objects 5. Manipulating objects 6. Becoming a graphic designer |
| **Video Production**   1. What is a video 2. Filming techniques 3. Using a storyboard 4. Planning a video 5. Importing and editing video 6. Video evaluation | **Data and Information**   1. Creating a paper based data base 2. Computer databases 3. Using a database 4. Using search tools 5. Comparing data visually 6. Data bases in real life | **Selection in Quizzes**   1. Exploring conditions 2. Selecting outcomes 3. Asking questions 4. Planning a quiz 5. Testing a quiz 6. Evaluating a quiz |
| **Year 6** | **Communication and Collaboration**   1. Internet addresses 2. Data packets 3. Working together 4. Shared working 5. How we communicate 6. Communicating responsibly | **Programming Variables in Games**   1. Introducing variables 2. Variable sin programming 3. Improving the game 4. Becoming a games designer 5. Design to cod 6. Improving and sharing | **3D Modelling**   1. Introduction to 3D modelling 2. Modifying 3D objects 3. Make yourvown name badge 4. Making a desk tidy 5. Planning a 3D model 6. Make your own 3D model |
| **Webpage Creation**   1. What makes a good website? 2. Becoming a web designer 3. Copyright or copy wrong? 4. How does it look? 5. Follow the breadcrumbs 6. Think before you link | **Data and Information: Spreadsheets**   1. Collecting data 2. Formatting a spreadsheet 3. What’s the formula 4. Calculate and duplicate 5. Event planning 6. Presenting data | **Sensing Movements**   1. The micro bit 2. Go with the flow 3. Sensing inputs 4. Finding your way 5. Designing a step counter 6. Making a step counter |