**Computing Long Term Plan - NCCE**

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| **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.Buttons2. Directions3. Forwards and backwards4 directions5. Getting there6. Routes | **Digital Writing****1**.Exploring the keyboard2. Adding and removing text3. Exploring the toolbar4. Making changes to texts5. Explaining my choices6. 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 match2. group and count3. Describe an object4. Making different groups5. Comparing Groups6. Answering questions | **Programming Animations** 1. Comparing tools
2. Joining blocks
3. Make a change
4. Adding sprites
5. Project design
6. Following my design
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| **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
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| **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?
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| **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 greatLight 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
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| **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
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| **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
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| **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
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| **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
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| **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
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| **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
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