# Computing (NCCE scheme): Skills and Sticky Knowledge Year 4

| Year Four | NCCE Unit Title/s | Key Skills and contents | Sticky Knowledge | Vocabulary |
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| **Autumn** | The Internet<br>EP: Internet homepage | • Computing Systems, Networks and Online Safety- CS (Computer Science), NW (Networks), SS (Safety and Security). Is everything on the internet factual and reliable? What to do if unsuitable images are found. | • To know that websites and their contents are created by people.<br>• To know that information found online is not necessarily honest, accurate or legal.<br>• To know what a URL address is and how to access a website. | **The Internet:**<br>Network,<br>router,<br>network security,<br>network switch,<br>Server,<br>wireless access point (WAP),<br>browser,<br>World Wide Web,<br>content,<br>links,<br>files,<br>download,<br>sharing,<br>ownership,<br>permission,<br>information. |
| | Repetition in Shapes | • Programming- AL (Algorithms), PG (Programming). To be able to write an algorithm to produce a given outcome<br>• Programming- AL (Algorithms), PG (Programming). I can design a program that includes count-controlled loops | • To be able to identify patterns of repetition in real life (brushing teeth, dance).<br>• To explain how to use the repeat block in Scratch | **Repetition in Shapes:**<br>Commands,<br>code snippet,<br>pattern,<br>repeat,<br>repetition,<br>value,<br>trace,<br>decompose,<br>procedure. |

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| Spring | Repetition in Games | • Programming- AL (Algorithms), PG (Programming). To be able to explain the difference between count-controlled and infinite loops<br>• Programming- AL (Algorithms), PG (Programming). To design and create a project that includes repetition | • I can explain the uses of repetition in programming and link this with the drawing of various shapes. | **Repetition in Games:**<br>loop,<br>repeat,<br>value,<br>forever,<br>infinite,<br>count-controlled loop,<br>animate,<br>event block,<br>duplicate,<br>modify/refine. |
| | Word Processing Skills | • Search for, and insert pictures<br>• Use the keyboard to add, or delete and manipulate text for others to read.<br>• Open, edit and save work on a laptop.<br>• Use Word. | • Word processing–a program used for creating texts and documents on a computer.<br>• Keyboard–a device made up of buttons that create letters, numbers and have other functions.<br>• Search engine–a program that searches for information on the internet.<br>• Delete–a button that deletes text.<br>• Backspace –a key to move the cursor backwards.<br>• Space bar –the large button on the keyboard that leaves spaces between letters.<br>• Undo –to go backwards to the previous step.<br>• Image –a picture.<br>• Font –style of the text. | **Word Processing skills**<br>Font style<br>Font colour<br>Indent text<br>Bullet Points<br>Line Spacing<br>Format<br>Slides<br>Transitions<br>Insert<br>Spacebar<br>Enter<br>Delete<br>Text<br>Word processing<br>Text box |

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| Summer | Audio Editing EP: Podcast | • Data and Information- DI (Data and Information). To describe how content can be accessed and added on the worldwide web.<br>• Creating Media- CM (Creating Media), DD (Design and Development), ET (Effective use of Tools), IT (Impact of Technology). To use a digital device to record sound.<br>• Creating Media- CM (Creating Media), DD (Design and Development), ET (Effective use of Tools), IT (Impact of Technology). To explain that audio can be changed through editing. | • I can identify the uses for recorded audio (music, podcasts etc.).<br>• To explain the ways that audio can be recorded and how to make it of high quality. | **Audio Editing:**<br>Audio,<br>record,<br>playback,<br>input,<br>output,<br>sound,<br>podcast,<br>selection,<br>mixing,<br>time shift,<br>Export,<br>Sound file. |
| | Photo Editing EP: Advertisement with edited image | • Creating Media- CM (Creating Media), DD (Design and Development), ET (Effective use of Tools), IT (Impact of Technology). To explain that digital images can be changed.<br>• Creating Media- CM (Creating Media), DD (Design and Development), ET (Effective use of Tools), IT (Impact of Technology). To recognise that not all images are accurate. | • To be able to explain the uses for gathered data.<br>• To be able to explain the different ways that data may be gathered. | **Photo Editing:**<br>Arrange,<br>digital,<br>crop,<br>undo,<br>copyright,<br>composition,<br>pixels,<br>rotate,<br>flip,<br>effects,<br>hue/saturation,<br>sepia,<br>illustrator,<br>vignette,<br>retouch,<br>clone,<br>recolour,<br>sharpen,<br>brighten,<br>composite,<br>cut,<br>copy,<br>paste,<br>original,<br>border,<br>layer. |

**Computing**

Computing Systems, Networks and Online Safety- CS (Computer Science), NW (Networks), SS (Safety and Security).

Creating Media- CM (Creating Media), DD (Design and Development), ET (Effective use of Tools), IT (Impact of Technology).

Data and Information- DI (Data and Information). Programming- AL (Algorithms), PG (Programming).

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