



Computing Year 3 Overview for the year



Year 3	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Term 1	<p>Computing systems and networks – Connecting Computers</p> <p>Lesson 1:</p> <p>LO: To explain how digital devices function KS2: CO 2, 4, 6</p> <p>Big Idea (Aspect): Materials (Hardware)</p>	<p>Computing systems and networks – Connecting Computers</p> <p>Lesson 2:</p> <p>LO: To identify input and output devices KS2: CO 2, 4, 6</p> <p>Big Idea (Aspect): Materials (Hardware)</p>	<p>Computing systems and networks – Connecting Computers</p> <p>Lesson 3:</p> <p>LO: To recognise how digital devices can change the way we work KS2: CO 2, 4, 6</p> <p>Big Idea (Aspect): Materials (Hardware)</p>	<p>Computing systems and networks – Connecting Computers</p> <p>Lesson 4:</p> <p>LO: To explain how a computer network can be used to share information KS2: CO 2, 4, 6</p> <p>Big Idea (Aspect): Materials (Hardware) Investigation (Networks)</p>	<p>Computing systems and networks – Connecting Computers</p> <p>Lesson 5:</p> <p>LO: To explore how digital devices can be connected KS2: CO 2, 4, 6</p> <p>Big Idea (Aspect): Materials (Hardware) Investigation (Networks)</p>	<p>Computing systems and networks – Connecting Computers</p> <p>Lesson 6:</p> <p>LO: To recognise the physical components of a network KS2: CO 2, 4, 6</p> <p>Big Idea (Aspect): Materials (Hardware) Investigation (Networks)</p>
Term 2	<p>Creating media – Stop-frame animation</p> <p>Lesson 1:</p> <p>LO: To explain that animation is a sequence of drawings or photographs KS2: CO 6, 7</p> <p>Big Idea (Aspect): Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Stop-frame animation</p> <p>Lesson 2:</p> <p>LO: To relate animated movement with a sequence of images KS2: CO 6, 7</p> <p>Big Idea (Aspect): Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Stop-frame animation</p> <p>Lesson 3:</p> <p>LO: To plan an animation KS2: CO 6, 7</p> <p>Big Idea (Aspect): Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Stop-frame animation</p> <p>Lesson 4:</p> <p>LO: To identify the need to work consistently and carefully KS2: CO 6, 7</p> <p>Big Idea (Aspect): Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Stop-frame animation</p> <p>Lesson 5:</p> <p>LO: To review and improve an animation KS2: CO 6, 7</p> <p>Big Idea (Aspect): Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Stop-frame animation</p> <p>Lesson 6:</p> <p>LO: To evaluate the impact of adding other media to an animation KS2: CO 6, 7</p> <p>Big Idea (Aspect): Place (Real world) Materials (Software) Creativity (Creation)</p>

<p>Term 3</p>	<p>Programming A – Sequencing Sounds</p> <p>Lesson 1:</p> <p>LO: To explore a new programming environment KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Humankind (Digital citizenship) Place (Digital world) Materials (Software) Processes (Physical interactions)</p>	<p>Programming A – Sequencing Sounds</p> <p>Lesson 2:</p> <p>LO: To identify that commands have an outcome KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Humankind (Digital citizenship) Place (Digital world) Materials (Software) Processes (Physical interactions)</p>	<p>Programming A – Sequencing Sounds</p> <p>Lesson 3:</p> <p>LO: To explain that a program has a start KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Humankind (Digital citizenship) Place (Digital world) Materials (Software) Processes (Physical interactions)</p>	<p>Programming A – Sequencing Sounds</p> <p>Lesson 4:</p> <p>LO: To recognise that a sequence of commands can have an order KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Humankind (Digital citizenship) Place (Digital world) Materials (Software) Processes (Physical interactions)</p>	<p>Programming A – Sequencing Sounds</p> <p>Lesson 5:</p> <p>LO: To change the appearance of my project KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Humankind (Digital citizenship) Place (Digital world) Materials (Software) Processes (Physical interactions)</p>	<p>Programming A – Sequencing Sounds</p> <p>Lesson 6:</p> <p>LO: To create a project from a task description KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Humankind (Digital citizenship) Place (Digital world) Materials (Software) Processes (Physical interactions)</p>
<p>Term 4</p>	<p>Data and information – Branching databases</p> <p>Lesson 1:</p> <p>LO: To create questions with yes/no answers KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Creativity (Creation)</p>	<p>Data and information – Branching databases</p> <p>Lesson 2:</p> <p>LO: To identify the attributes needed to collect data about an object KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Creativity (Creation)</p>	<p>Data and information – Branching databases</p> <p>Lesson 3:</p> <p>LO: To create a branching database KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Creativity (Creation)</p>	<p>Data and information – Branching databases</p> <p>Lesson 4:</p> <p>LO: To explain why it is helpful for a database to be well structured KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Creativity (Creation)</p>	<p>Data and information – Branching databases</p> <p>Lesson 5:</p> <p>LO: To plan the structure of a branching database KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Creativity (Creation)</p>	<p>Data and information – Branching databases</p> <p>Lesson 6:</p> <p>LO: To independently create an identification tool KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Creativity (Creation)</p>

<p>Term 5</p>	<p>Creating media – Desktop Publishing</p> <p>Lesson 1:</p> <p>LO: To recognise how text and images convey information KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Comparison (Digital searching) Creativity (Creation)</p>	<p>Creating media – Desktop Publishing</p> <p>Lesson 2:</p> <p>LO: To recognise that text and layout can be edited KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Comparison (Digital searching) Creativity (Creation)</p>	<p>Creating media – Desktop Publishing</p> <p>Lesson 3:</p> <p>LO: To choose appropriate page settings KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Comparison (Digital searching) Creativity (Creation)</p>	<p>Creating media – Desktop Publishing</p> <p>Lesson 4:</p> <p>LO: To add content to a desktop publishing publication KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Comparison (Digital searching) Creativity (Creation)</p>	<p>Creating media – Desktop Publishing</p> <p>Lesson 5:</p> <p>LO: To consider how different layouts can suit different purposes KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Comparison (Digital searching) Creativity (Creation)</p>	<p>Creating media – Desktop Publishing</p> <p>Lesson 6:</p> <p>LO: To consider the benefits of desktop publishing KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Comparison (Digital searching) Creativity (Creation)</p>
<p>Term 6</p>	<p>Programming B – Events and actions in programmes</p> <p>Lesson 1:</p> <p>LO: To explain how a sprite moves in an existing project KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Processes (Physical interaction)</p>	<p>Programming B – Events and actions in programmes</p> <p>Lesson 2:</p> <p>LO: To create a program to move a sprite in four directions KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Processes (Physical interaction)</p>	<p>Programming B – Events and actions in programmes</p> <p>Lesson 3:</p> <p>LO: To adapt a program to a new context KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Processes (Physical interaction)</p>	<p>Programming B – Events and actions in programmes</p> <p>Lesson 4:</p> <p>LO: To develop my program by adding features KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Processes (Physical interaction)</p>	<p>Programming B – Events and actions in programmes</p> <p>Lesson 5:</p> <p>LO: To identify and fix bugs in a program KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Processes (Physical interaction)</p>	<p>Programming B – Events and actions in programmes</p> <p>Lesson 6:</p> <p>LO: To design and create a maze-based challenge KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Processes (Physical interaction)</p>



Year 4 Computing Overview for the year

Year 4	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Term 1	<p>Computing systems and networks – The Internet</p> <p>Lesson 1:</p> <p>LO: To describe how networks physically connect to other networks. KS2: CO 4, 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Humankind (Communication and Staying safe) Investigation (Networks) Comparison (Digital searching)</p>	<p>Computing systems and networks – The Internet</p> <p>Lesson 2:</p> <p>LO: To recognise how networked devices make up the internet KS2: CO 4, 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Humankind (Communication and Staying safe) Investigation (Networks) Comparison (Digital searching)</p>	<p>Computing systems and networks – The Internet</p> <p>Lesson 3:</p> <p>LO: To outline how websites can be shared via the World Wide Web (www.) KS2: CO 4, 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Humankind (Communication and Staying safe) Investigation (Networks) Comparison (Digital searching)</p>	<p>Computing systems and networks – The Internet</p> <p>Lesson 4:</p> <p>LO: To describe how content can be added and accessed on the World Wide Web. KS2: CO 4, 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Humankind (Communication and Staying safe) Investigation (Networks) Comparison (Digital searching)</p>	<p>Computing systems and networks – The Internet</p> <p>Lesson 5:</p> <p>LO: Recognise how the content of the WWW is created by people. KS2: CO 4, 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Humankind (Communication and Staying safe) Investigation (Networks) Comparison (Digital searching)</p>	<p>Computing systems and networks – The Internet</p> <p>Lesson 6:</p> <p>LO: To evaluate the consequences of unreliable content KS2: CO 4, 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Humankind (Communication and Staying safe) Investigation (Networks) Comparison (Digital searching)</p>
Term 2	<p>Creating media - Audio production</p> <p>Lesson 1:</p> <p>LO: To identify that sound can be recorded KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software and Hardware) Creativity (Creation)</p>	<p>Creating media - Audio production</p> <p>Lesson 2:</p> <p>LO: To explain that audio recordings can be edited KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software and Hardware) Creativity (Creation)</p>	<p>Creating media - Audio production</p> <p>Lesson 3:</p> <p>LO: To recognise the different parts of creating a podcast project KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software and Hardware) Creativity (Creation)</p>	<p>Creating media - Audio production</p> <p>Lesson 4:</p> <p>LO: To apply audio editing skills independently KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software and Hardware) Creativity (Creation)</p>	<p>Creating media - Audio production</p> <p>Lesson 5:</p> <p>LO: To combine audio to enhance my podcast project KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software and Hardware) Creativity (Creation)</p>	<p>Creating media - Audio production</p> <p>Lesson 6:</p> <p>LO: To evaluate the effective use of audio KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software and Hardware) Creativity (Creation)</p>

<p>Term 3</p>	<p>Programming A – Repetition in Shapes</p> <p>Lesson 1:</p> <p>LO: To identify that accuracy in programming is important. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software) Processes (Physical Interaction)</p>	<p>Programming A – Repetition in Shapes</p> <p>Lesson 2:</p> <p>LO: To create a program in a text-based language. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software) Processes (Physical Interaction)</p>	<p>Programming A – Repetition in Shapes</p> <p>Lesson 3:</p> <p>LO: To explain what ‘repeat’ means. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software) Processes (Physical Interaction)</p>	<p>Programming A – Repetition in Shapes</p> <p>Lesson 4:</p> <p>LO: To modify a count-controlled loop to produce a given outcome. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software) Processes (Physical Interaction)</p>	<p>Programming A – Repetition in Shapes</p> <p>Lesson 5:</p> <p>LO: To decompose a task into small steps. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software) Processes (Physical Interaction)</p>	<p>Programming A – Repetition in Shapes</p> <p>Lesson 6:</p> <p>LO: To create a program that uses count-controlled loops to produce a given outcome. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software) Processes (Physical Interaction)</p>
<p>Term 4</p>	<p>Data and information – Data logging</p> <p>Lesson 1:</p> <p>LO: To explain that data gathered over time can be used to answer questions KS2: CO 2, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Hardware) Nature (Real world)</p>	<p>Data and information – Data logging</p> <p>Lesson 2:</p> <p>LO: To use a digital device to collect data automatically KS2: CO 2, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Hardware) Nature (Real world)</p>	<p>Data and information – Data logging</p> <p>Lesson 3:</p> <p>LO: To explain that a data logger collects ‘data points’ from sensors over time KS2: CO 2, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Hardware) Nature (Real world)</p>	<p>Data and information – Data logging</p> <p>Lesson 4:</p> <p>LO: To recognise how a computer can help us analyse data KS2: CO 2, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Hardware) Nature (Real world)</p>	<p>Data and information – Data logging</p> <p>Lesson 5:</p> <p>LO: To identify the data needed to answer questions KS2: CO 2, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Hardware) Nature (Real world)</p>	<p>Data and information – Data logging</p> <p>Lesson 6:</p> <p>LO: To use data from sensors to answer questions KS2: CO 2, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Hardware) Nature (Real world)</p>

<p>Term 5</p>	<p>Creating media – Photo Editing</p> <p>Lesson 1:</p> <p>LO: To explain that the composition of digital images can be changed. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Photo Editing</p> <p>Lesson 2:</p> <p>LO: To explain that colours can be changed in digital images. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Photo Editing</p> <p>Lesson 3:</p> <p>LO: To explain how cloning can be used in photo editing. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Photo Editing</p> <p>Lesson 4:</p> <p>LO: To explain that images can be combined. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Photo Editing</p> <p>Lesson 5:</p> <p>LO: To combine images for a purpose. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Photo Editing</p> <p>Lesson 6:</p> <p>LO: To evaluate how changes can improve an image. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Digital world) Materials (Software) Creativity (Creation)</p>
<p>Term 6</p>	<p>Programming B – Repetition in games</p> <p>Lesson 1:</p> <p>LO: To develop the use of count-controlled loops in a different programming environment KS2: CO 1, 2, 3</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and computational thinking) Processes (Physical Interaction)</p>	<p>Programming B – Repetition in games</p> <p>Lesson 2:</p> <p>LO: To explain that in programming there are infinite loops and count controlled loops KS2: CO 1, 2, 3</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and computational thinking) Processes (Physical Interaction)</p>	<p>Programming B – Repetition in games</p> <p>Lesson 3:</p> <p>LO: To develop a design that includes two or more loops which run at the same time KS2: CO 1, 2, 3</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and computational thinking) Processes (Physical Interaction)</p>	<p>Programming B – Repetition in games</p> <p>Lesson 4:</p> <p>LO: To modify an infinite loop in a given program KS2: CO 1, 2, 3</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and computational thinking) Processes (Physical Interaction)</p>	<p>Programming B – Repetition in games</p> <p>Lesson 5:</p> <p>LO: To design a project that includes repetition KS2: CO 1, 2, 3</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and computational thinking) Processes (Physical Interaction)</p>	<p>Programming B – Repetition in games</p> <p>Lesson 6:</p> <p>LO: To create a project that includes repetition KS2: CO 1, 2, 3</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and computational thinking) Processes (Physical Interaction)</p>



Year 5 Computing overview for the year

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Term 1	<p>Computing systems and networks – Systems & Searching</p> <p>Lesson 1:</p> <p>LO: To explain that computers can be connected together to form systems. KS2: CO 1, 2, 4, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Networks) Materials (Hardware)</p>	<p>Computing systems and networks – Systems & Searching</p> <p>Lesson 2:</p> <p>LO: To recognise the role of computer systems in our lives. KS2: CO 1, 2, 4, 6</p> <p>Big Idea (Aspect):</p> <p>Materials (Hardware)</p>	<p>Computing systems and networks – Systems & Searching</p> <p>Lesson 3:</p> <p>LO: To experiment with search engines. KS2: CO 1, 2, 4, 6</p> <p>Big Idea (Aspect):</p> <p>Comparison (Digital searching)</p>	<p>Computing systems and networks – Systems & Searching</p> <p>Lesson 4:</p> <p>LO: To describe how search engines select results. KS2: CO 1, 2, 4, 6</p> <p>Big Idea (Aspect):</p> <p>Comparison (Digital searching)</p>	<p>Computing systems and networks – Systems & Searching</p> <p>Lesson 5:</p> <p>LO: To explain how search results are ranked. KS2: CO 1, 2, 4, 6</p> <p>Big Idea (Aspect):</p> <p>Comparison (Digital searching)</p>	<p>Computing systems and networks – Systems & Searching</p> <p>Lesson 6:</p> <p>LO: To recognise why the order of results is important, and to whom. KS2: CO 1, 2, 4, 6</p> <p>Big Idea (Aspect):</p> <p>Comparison (Digital searching)</p>
Term 2	<p>Creating media – Video Production</p> <p>Lesson 1:</p> <p>LO: To explain what makes a video effective. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Video Production</p> <p>Lesson 2:</p> <p>LO: To identify digital devices that can record video. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Video Production</p> <p>Lesson 3:</p> <p>LO: To capture video using a range of techniques. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Video Production</p> <p>Lesson 4:</p> <p>LO: To create a storyboard. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Video Production</p> <p>Lesson 5:</p> <p>LO: To identify that video can be improved through reshooting and editing. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software) Creativity (Creation)</p>	<p>Creating media – Video Production</p> <p>Lesson 6:</p> <p>LO: To consider the impact of the choices when making and sharing a video. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect):</p> <p>Place (Real world) Materials (Software) Creativity (Creation)</p>

<p>Term 3</p>	<p>Programming A – Selection in physical computing.</p> <p>Lesson 1:</p> <p>LO: To control a simple circuit connected to a computer. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Processes (Physical Interaction) Materials (Hardware)</p>	<p>Programming A – Selection in physical computing.</p> <p>Lesson 2:</p> <p>LO: To write a program that includes count-controlled loops. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Processes (Physical Interaction) Materials (Hardware)</p>	<p>Programming A – Selection in physical computing.</p> <p>Lesson 3:</p> <p>LO: To explain that a loop can stop when a condition is met. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Processes (Physical Interaction) Materials (Hardware)</p>	<p>Programming A – Selection in physical computing.</p> <p>Lesson 4:</p> <p>LO: To explain that a loop can be used to repeatedly check whether a condition has been met. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Processes (Physical Interaction) Materials (Hardware)</p>	<p>Programming A – Selection in physical computing.</p> <p>Lesson 5:</p> <p>LO: To design a physical project that includes selection. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Processes (Physical Interaction) Materials (Hardware)</p>	<p>Programming A – Selection in physical computing.</p> <p>Lesson 6:</p> <p>LO: To create a program that controls a physical computing project. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Processes (Physical Interaction) Materials (Hardware)</p>
<p>Term 4</p>	<p>Data and information – Flat-file databases.</p> <p>Lesson 1: Creating a paper-based database</p> <p>LO: To choose a form to record information. KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world)</p>	<p>Data and information – Flat-file databases.</p> <p>Lesson 2: Computer databases</p> <p>LO: To compare and computer-based databases KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world)</p>	<p>Data and information – Flat-file databases.</p> <p>Lesson 3: Using a database</p> <p>LO: To outline how you can answer questions by grouping and then sorting data KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world)</p>	<p>Data and information – Flat-file databases.</p> <p>Lesson 4: Using search tools</p> <p>LO: To explain that tools can be used to select specific data KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world)</p>	<p>Data and information – Flat-file databases.</p> <p>Lesson 5: Comparing data visually</p> <p>LO: To explain that computer programs can be used to compare data visually KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world)</p>	<p>Data and information – Flat-file databases.</p> <p>Lesson 6: Databases in real life</p> <p>LO: To use a real-world databases to answer questions. KS2: CO 5, 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Place (Real world)</p>

<p>Term 5</p>	<p>Creating media – Introduction to vector graphics.</p> <p>Lesson 1:</p> <p>LO: To identify that drawing tools can be used to produce different outcomes KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Creativity (Creation)</p>	<p>Creating media – Introduction to vector graphics.</p> <p>Lesson 2:</p> <p>LO: To create a vector drawing by combining shapes KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Creativity (Creation)</p>	<p>Creating media – Introduction to vector graphics.</p> <p>Lesson 3:</p> <p>LO: To use tools to achieve a desired effect KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Creativity (Creation)</p>	<p>Creating media – Introduction to vector graphics.</p> <p>Lesson 4:</p> <p>LO: To recognise that vector drawings consist of layers KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Creativity (Creation)</p>	<p>Creating media – Introduction to vector graphics.</p> <p>Lesson 5:</p> <p>LO: To group objects to make them easier to work with KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Creativity (Creation)</p>	<p>Creating media – Introduction to vector graphics.</p> <p>Lesson 6:</p> <p>LO: To apply what I have learned about vector drawings KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Creativity (Creation)</p>
<p>Term 6</p>	<p>Programming B – Selection in quizzes.</p> <p>Lesson 1:</p> <p>LO: To explain how selection is used in computer programs KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software)</p>	<p>Programming B – Selection in quizzes.</p> <p>Lesson 2:</p> <p>LO: To relate that a conditional statement connects a condition to an outcome KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software)</p>	<p>Programming B – Selection in quizzes.</p> <p>Lesson 3:</p> <p>LO: To explain how selection directs the flow of a program KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software)</p>	<p>Programming B – Selection in quizzes.</p> <p>Lesson 4:</p> <p>LO: To design a program which uses selection KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software)</p>	<p>Programming B – Selection in quizzes.</p> <p>Lesson 5:</p> <p>LO: To create a program which uses selection KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software)</p>	<p>Programming B – Selection in quizzes.</p> <p>Lesson 6:</p> <p>LO: To evaluate my program KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Software)</p>



Year 6 Computing Overview for the year

Year 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Term 1	<p>Computing systems and networks – Communication and collaboration.</p> <p>Lesson 1:</p> <p>LO: To explain the importance of internet addresses. KS2: CO 4, 6, 7</p> <p>Big Idea (Aspect): Investigation (Networks)</p>	<p>Computing systems and networks – Communication and collaboration.</p> <p>Lesson 2:</p> <p>LO: To recognise how data is transferred across the internet. KS2: CO 4, 6, 7</p> <p>Big Idea (Aspect): Investigation (Networks)</p>	<p>Computing systems and networks – Communication and collaboration.</p> <p>Lesson 3:</p> <p>LO: To explain how sharing information online can help people to work together. KS2: CO 4, 6, 7</p> <p>Big Idea (Aspect): Investigation (Networks) Place (Digital world)</p>	<p>Computing systems and networks – Communication and collaboration.</p> <p>Lesson 4:</p> <p>LO: To evaluate different ways of working together online. KS2: CO 4, 6, 7</p> <p>Big Idea (Aspect): Humankind (Staying safe) Investigation (Networks) Place (Digital world)</p>	<p>Computing systems and networks – Communication and collaboration.</p> <p>Lesson 5:</p> <p>LO: To recognise how we communicate using technology. KS2: CO 4, 6, 7</p> <p>Big Idea (Aspect): Humankind (Staying safe and Communication) Investigation (Networks) Place (Digital world)</p>	<p>Computing systems and networks – Communication and collaboration.</p> <p>Lesson 6:</p> <p>LO: To evaluate different methods of online communication. KS2: CO 4, 6, 7</p> <p>Big Idea (Aspect): Investigation (Networks) Place (Digital world)</p>
Term 2	<p>Creating Media – Web page creation</p> <p>Lesson 1:</p> <p>LO: To review an existing website and consider its structure. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect): Comparison (Digital searching)</p>	<p>Creating Media – Web page creation</p> <p>Lesson 2:</p> <p>LO: To plan the features of a web page. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect): Place (Digital world) Creativity (Creation)</p>	<p>Creating Media – Web page creation</p> <p>Lesson 3:</p> <p>LO: To consider the ownership and use of images (copyright). KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect): Place (Digital world) Creativity (Creation) Humankind (Digital Citizenship)</p>	<p>Creating Media – Web page creation</p> <p>Lesson 4:</p> <p>LO: To recognise the need to preview pages. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect): Place (Digital world) Creativity (Creation)</p>	<p>Creating Media – Web page creation</p> <p>Lesson 5:</p> <p>LO: To outline the need for a navigation path. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect): Place (Digital world) Creativity (Creation)</p>	<p>Creating Media – Web page creation</p> <p>Lesson 6:</p> <p>LO: To recognise the implications of linking to content owned by other people. KS2: CO 5, 6, 7</p> <p>Big Idea (Aspect): Place (Digital world) Creativity (Creation) Humankind (Digital Citizenship)</p>

<p style="text-align: center;">Term 3</p>	<p>Programming A – Variables in games</p> <p>Lesson 1:</p> <p>LO: To define a ‘variable’ as something that is changeable. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Materials (Software) Creativity (Creation) Investigation (Data and Computational Thinking)</p>	<p>Programming A – Variables in games</p> <p>Lesson 2:</p> <p>LO: To explain why a variable is used in a program. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Materials (Software) Creativity (Creation) Investigation (Data and Computational Thinking)</p>	<p>Programming A – Variables in games</p> <p>Lesson 3:</p> <p>LO: To choose how to improve a game by using variables. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Materials (Software) Creativity (Creation) Investigation (Data and Computational Thinking)</p>	<p>Programming A – Variables in games</p> <p>Lesson 4:</p> <p>LO: To design a project that builds on a given example. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Materials (Software) Creativity (Creation) Investigation (Data and Computational Thinking)</p>	<p>Programming A – Variables in games</p> <p>Lesson 5:</p> <p>LO: To use my design to create a project. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Materials (Software) Creativity (Creation) Investigation (Data and Computational Thinking)</p>	<p>Programming A – Variables in games</p> <p>Lesson 6:</p> <p>LO: To evaluate my project. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Place (Digital World) Materials (Software) Creativity (Creation) Investigation (Data and Computational Thinking)</p>
<p style="text-align: center;">Term 4</p>	<p>Data and information – Introduction to Spreadsheets</p> <p>Lesson 1:</p> <p>LO: To create a data set in a spreadsheet. KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Data and information – Introduction to Spreadsheets</p> <p>Lesson 2:</p> <p>LO: To build a data set in a spreadsheet. KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Data and information – Introduction to Spreadsheets</p> <p>Lesson 3:</p> <p>LO: To explain that formulas can be used to produce calculated data. KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Data and information – Introduction to Spreadsheets</p> <p>Lesson 4:</p> <p>LO: To apply formulas to data. KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Data and information – Introduction to Spreadsheets</p> <p>Lesson 5:</p> <p>LO: To create a spreadsheet to plan an event. KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Data and information – Introduction to Spreadsheets</p> <p>Lesson 6:</p> <p>LO: To choose suitable ways to present data. KS2: CO 6</p> <p>Big Idea (Aspect):</p> <p>Nature (Real world) Creativity (Creation) Place (Real world) Materials (Software)</p>

<p>Term 5</p>	<p>Creating media – 3D Modelling</p> <p>Lesson 1:</p> <p>LO: To recognise that you can work in three dimensions on a computer. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Creating media – 3D Modelling</p> <p>Lesson 2:</p> <p>LO: To identify that digital 3D objects can be modified. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Creating media – 3D Modelling</p> <p>Lesson 3:</p> <p>LO: To recognise that objects can be combined in a 3D model. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Creating media – 3D Modelling</p> <p>Lesson 4:</p> <p>LO: To create a 3D model for a given purpose. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Creating media – 3D Modelling</p> <p>Lesson 5:</p> <p>LO: To plan my own 3D model. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Creativity (Creation) Place (Real world) Materials (Software)</p>	<p>Creating media – 3D Modelling</p> <p>Lesson 6:</p> <p>LO: To create my own digital 3D model. KS2: CO 6, 7</p> <p>Big Idea (Aspect):</p> <p>Creativity (Creation) Place (Real world) Materials (Software)</p>
<p>Term 6</p>	<p>Programming B - Sensing movement</p> <p>Lesson 1:</p> <p>LO: To create a programme to run on a controllable device. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Hardware) Processes (Physical Interactions)</p>	<p>Programming B - Sensing movement</p> <p>Lesson 2:</p> <p>LO: To explain that selection can control the flow of a programme. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Hardware) Processes (Physical Interactions)</p>	<p>Programming B - Sensing movement</p> <p>Lesson 3:</p> <p>LO: To update a variable with a user input. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Hardware) Processes (Physical Interactions)</p>	<p>Programming B - Sensing movement</p> <p>Lesson 4:</p> <p>LO: To use a conditional statement to compare a variable to a value. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Hardware) Processes (Physical Interactions)</p>	<p>Programming B - Sensing movement</p> <p>Lesson 5:</p> <p>LO: To design a project that uses inputs and outputs on a controllable device. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Hardware) Processes (Physical Interactions)</p>	<p>Programming B - Sensing movement</p> <p>Lesson 6:</p> <p>LO: To develop a programme to use inputs and outputs on a controllable device. KS2: CO 1, 2, 3, 6</p> <p>Big Idea (Aspect):</p> <p>Investigation (Data and Computational Thinking) Materials (Hardware) Processes (Physical Interactions)</p>

