Year Four Computing Overview for the Year

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

Year Four Computing Overview for the Year

	Big Idea (Aspect): **Place** (Real world) **Materials** (Software and Hardware) **Creativity** (Creation)	**Big Idea (Aspect):** **Place** (Real world) **Materials** (Software and Hardware) **Creativity** (Creation)	**Big Idea (Aspect):** **Place** (Real world) **Materials** (Software and Hardware) **Creativity** (Creation)	**Big Idea (Aspect):** **Place** (Real world) **Materials** (Software and Hardware) **Creativity** (Creation)	**Big Idea (Aspect):** **Place** (Real world) **Materials** (Software and Hardware) **Creativity** (Creation)	**Big Idea (Aspect):** **Place** (Real world) **Materials** (Software and Hardware) **Creativity** (Creation)
Term 3	**Programming A – Repetition in Shapes** **Lesson 1:** **LO:** To identify that accuracy in programming is important. **KS2: CO 1, 2, 3, 6** **Big Idea (Aspect):** **Investigation** (Data and Computational Thinking) **Materials** (Software) **Processes** (Physical Interaction)	**Programming A – Repetition in Shapes** **Lesson 2:** **LO:** To create a program in a text-based language. **KS2: CO 1, 2, 3, 6** **Big Idea (Aspect):** **Investigation** (Data and Computational Thinking) **Materials** (Software) **Processes** (Physical Interaction)	**Programming A – Repetition in Shapes** **Lesson 3:** **LO:** To explain what ‘repeat’ means. **KS2: CO 1, 2, 3, 6** **Big Idea (Aspect):** **Investigation** (Data and Computational Thinking) **Materials** (Software) **Processes** (Physical Interaction)	**Programming A – Repetition in Shapes** **Lesson 4:** **LO:** To modify a count-controlled loop to produce a given outcome. **KS2: CO 1, 2, 3, 6** **Big Idea (Aspect):** **Investigation** (Data and Computational Thinking) **Materials** (Software) **Processes** (Physical Interaction)	**Programming A – Repetition in Shapes** **Lesson 5:** **LO:** To decompose a task into small steps. **KS2: CO 1, 2, 3, 6** **Big Idea (Aspect):** **Investigation** (Data and Computational Thinking) **Materials** (Software) **Processes** (Physical Interaction)	**Programming A – Repetition in Shapes** **Lesson 6:** **LO:** To create a program that uses count-controlled loops to produce a given outcome. **KS2: CO 1, 2, 3, 6** **Big Idea (Aspect):** **Investigation** (Data and Computational Thinking) **Materials** (Software) **Processes** (Physical Interaction)
Term 4	**Data and information – Data logging** **Lesson 1:**	**Data and information – Data logging** **Lesson 2:**	**Data and information – Data logging** **Lesson 3:**	**Data and information – Data logging** **Lesson 4:**	**Data and information – Data logging** **Lesson 5:**	**Data and information – Data logging** **Lesson 6:**

Year Four Computing Overview for the Year

	LO: To explain that data gathered over time can be used to answer questions **KS2: CO 2, 6** **Big Idea (Aspect):** **Place** (Real world) **Materials** (Hardware) **Nature** (Real world)	**LO:** To use a digital device to collect data automatically **KS2: CO 2, 6** **Big Idea (Aspect):** **Place** (Real world) **Materials** (Hardware) **Nature** (Real world)	**LO:** To explain that a data logger collects 'data points' from sensors over time **KS2: CO 2, 6** **Big Idea (Aspect):** **Place** (Real world) **Materials** (Hardware) **Nature** (Real world)	**LO:** To recognise how a computer can help us analyse data **KS2: CO 2, 6** **Big Idea (Aspect):** **Place** (Real world) **Materials** (Hardware) **Nature** (Real world)	**LO:** To identify the data needed to answer questions **KS2: CO 2, 6** **Big Idea (Aspect):** **Place** (Real world) **Materials** (Hardware) **Nature** (Real world)	**LO:** To use data from sensors to answer questions **KS2: CO 2, 6** **Big Idea (Aspect):** **Place** (Real world) **Materials** (Hardware) **Nature** (Real world)
Term 5	**Creating media – Photo Editing** **Lesson 1:** **LO:** To explain that the composition of digital images can be changed. **KS2: CO 6, 7** **Big Idea (Aspect):** **Place** (Digital world) **Materials** (Software) **Creativity** (Creation)	**Creating media – Photo Editing** **Lesson 2:** **LO:** To explain that colours can be changed in digital images. **KS2: CO 6, 7** **Big Idea (Aspect):** **Place** (Digital world) **Materials** (Software) **Creativity** (Creation)	**Creating media – Photo Editing** **Lesson 3:** **LO:** To explain how cloning can be used in photo editing. **KS2: CO 6, 7** **Big Idea (Aspect):** **Place** (Digital world) **Materials** (Software) **Creativity** (Creation)	**Creating media – Photo Editing** **Lesson 4:** **LO:** To explain that images can be combined. **KS2: CO 6, 7** **Big Idea (Aspect):** **Place** (Digital world) **Materials** (Software) **Creativity** (Creation)	**Creating media – Photo Editing** **Lesson 5:** **LO:** To combine images for a purpose. **KS2: CO 6, 7** **Big Idea (Aspect):** **Place** (Digital world) **Materials** (Software) **Creativity** (Creation)	**Creating media – Photo Editing** **Lesson 6:** **LO:** To evaluate how changes can improve an image. **KS2: CO 6, 7** **Big Idea (Aspect):** **Place** (Digital world) **Materials** (Software) **Creativity** (Creation)

Year Four Computing Overview for the Year

Term 6	**Programming B – Repetition in games** **Lesson 1:** **LO:** To develop the use of count-controlled loops in a different programming environment **KS2: CO 1, 2, 3** **Big Idea (Aspect):** **Investigation** (Data and computational thinking) **Processes** (Physical Interaction)	**Programming B – Repetition in games** **Lesson 2:** **LO:** To explain that in programming there are infinite loops and count controlled loops **KS2: CO 1, 2, 3** **Big Idea (Aspect):** **Investigation** (Data and computational thinking) **Processes** (Physical Interaction)	**Programming B – Repetition in games** **Lesson 3:** **LO:** To develop a design that includes two or more loops which run at the same time **KS2: CO 1, 2, 3** **Big Idea (Aspect):** **Investigation** (Data and computational thinking) **Processes** (Physical Interaction)	**Programming B – Repetition in games** **Lesson 4:** **LO:** To modify an infinite loop in a given program **KS2: CO 1, 2, 3** **Big Idea (Aspect):** **Investigation** (Data and computational thinking) **Processes** (Physical Interaction)	**Programming B – Repetition in games** **Lesson 5:** **LO:** To design a project that includes repetition **KS2: CO 1, 2, 3** **Big Idea (Aspect):** **Investigation** (Data and computational thinking) **Processes** (Physical Interaction)	**Programming B – Repetition in games** **Lesson 6:** **LO:** To create a project that includes repetition **KS2: CO 1, 2, 3** **Big Idea (Aspect):** **Investigation** (Data and computational thinking) **Processes** (Physical Interaction)