



## Medium-Term Planning

### Subject: ICT



<b>Term and Year:</b>	Spring 1 2022
<b>Teacher:</b>	Miss O'Neil
<b>Subject:</b>	ICT
<b>Vocabulary that will be taught:</b>	<ol style="list-style-type: none"><li>1. Input</li><li>2. Output</li><li>3. Hard drive</li><li>4. Ram</li><li>5. CPU</li><li>6. GPU</li><li>7. Laptop</li><li>8. Desktop</li><li>9. Tablet</li><li>10. Memory</li></ol>

#### **National Curriculum Objectives:**

- Co2/1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output

#### **ICT Skills that will be taught and assessed:**

- Understanding what the different components of a computer do and how they work together
- Drawing comparisons across different types of computers
- Learning what a server does

Using decomposition to explain the parts of a laptop computer

- Using decomposition to explore the code behind an animation
- Using repetition in programs
- Understanding that computers follow instructions
- Using an algorithm to explain the roles of different parts of a computer
- Using logical reasoning to explain how simple algorithms work
- Explaining the purpose of an algorithm
- Forming algorithms independently

Solving unplugged problems by decomposing them into smaller parts

- Using decomposition to understand the purpose of a script of code
- Using decomposition to help solve problems

- Identifying patterns through unplugged activities
- Using past experiences to help solve new problems
- Using abstraction to identify the important parts when completing both plugged and unplugged activities
- Creating algorithms for a specific purpose

<b>Focus of each lesson</b> <b>'Can I...' Statement(s)</b>		<b>Activities/Key points</b>
Lesson 1	LO: To recognise basic inputs and outputs <ul style="list-style-type: none"> <li>• I recognise some inputs and outputs</li> <li>• I understand that a computer follows instructions</li> <li>• I can suggest what the computer is doing</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the inputs and outputs</li> <li>• Children to draw the inputs and outputs</li> <li>• Children are to label the inputs and outputs.</li> </ul>
Lesson 2	LO: To decompose a laptop <ul style="list-style-type: none"> <li>• I can suggest a laptop's inputs and outputs</li> <li>• I recognise a laptop is made up of many parts</li> <li>• I can use logic to explain the purpose of some parts</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the difference between a laptop and a desktop in terms of inputs and outputs.</li> <li>• Discuss RAM, Hard drives and CPU.</li> </ul>
Lesson 3	LO: To understand the purpose of computer parts <ul style="list-style-type: none"> <li>• I can explain that a computer is made up of many parts</li> <li>• I can suggest the purpose of each part</li> <li>• I can follow an algorithm</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the difference between a CPU and GPU.</li> <li>• Use an algorithm to create a piece of artwork.</li> </ul>

Lesson 4	<p>LO: To understand the purpose of computer parts</p> <ul style="list-style-type: none"> <li>• I can explain that a computer is made up of many parts</li> <li>• I can suggest the purpose of each part</li> <li>• I can use a QR code</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the memory of a computer or laptop.</li> <li>• Hello Ruby to play memory pairs game.</li> <li>• Memory scavenger hunt.</li> </ul>
Lesson 5	<p>LO: To decompose a tablet computer</p> <ul style="list-style-type: none"> <li>• I recognise a tablet is a computer</li> <li>• I can compare similarities and differences across different types of computer</li> <li>• I can use logic to suggest what's inside a computer</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss tablets and how they are used.</li> <li>• Watch the deconstruction of a tablet.</li> </ul>