



Medium-Term Planning

Subject: ICT



Term and Year:	Autumn 1 2021
Teacher:	Miss O'Neil
Subject:	ICT
Vocabulary that will be taught:	<ol style="list-style-type: none">1. Program2. Game3. Algorithm4. Decompose5. Code6. Decompose7. Coding blocks

National Curriculum Objectives:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

ICT Skills that will be taught and assessed:

- 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
- Using logical thinking to explore more complex software; predicting, testing and explaining what it does
- Incorporating loops to make code more efficient
- Remixing existing code
- Using a more systematic approach to debugging code, justifying what is wrong and how it can be corrected

Focus of each lesson
'Can I...' Statement(s)

Activities/Key points

Lesson 1	<p>LO: To explore a programming application</p> <ul style="list-style-type: none"> • Can I explain that Scratch is a coding application? • Can I predict what I think different codes will do? • Can I explore an application independently? • Can I explain what I found? 	<ul style="list-style-type: none"> • Model logging on. • Model using the program. • Allow children to explore the 'sprites'
Lesson 2	<p>LO: To use repetition (a loop) in a program</p> <ul style="list-style-type: none"> • Can I understand and explain what a loop is? • Can I recognise when a loop is used? • Can I choose an appropriate loop? 	<ul style="list-style-type: none"> • Model creating a loop. • Model fixing errors in a loop. • Children to create a loop.
Lesson 3	<p>LO: To program an animation</p> <ul style="list-style-type: none"> • Can I decompose a project? • Can I plan what I want to happen? • Can I select the blocks to make that happen? 	<ul style="list-style-type: none"> • Model how to make an animation. • Children to make an animation.
Lesson 4	<p>LO: To program a story</p> <ul style="list-style-type: none"> • Can I choose appropriate blocks? • Can I continue someone else's program? • Can I debug my own program? 	<ul style="list-style-type: none"> • Model creating a story and explain how to fix bugs in. story. • Children to create their own story for peers to complete.
Lesson 5	<p>LO: To program a game</p> <ul style="list-style-type: none"> • Can I explain the purpose of an algorithm? • Can I decompose a problem? • Can I use an algorithm to code a program? 	<ul style="list-style-type: none"> • Explain the purpose of an algorithm and give examples. • Model writing an algorithm. • Children to write their own algorithm to create a game.

