

Y3	Programming - Sequence	Computational Thinking – Evaluation	What this looks like – Example Projects
GDS	<ul style="list-style-type: none"> <li>Read, design, write and debug a <b>program</b> to achieve specific goals and to simulate physical systems.</li> <li>I can plan and run a <b>sequence</b> of simple commands to achieve a specific goal.</li> </ul>	<ul style="list-style-type: none"> <li>Can use <u>evaluation</u> to identify and make attempts at improving their Program by ensuring their <b>sequence</b> is as effective as possible.</li> </ul>	<p>Pupils should be developing a greater understanding of programming. Through experimenting with various approaches should be designing programs that are sequential.</p> <p>These could be linked to topics or books for example “How to Wash a Woolly Mammoth” or “How to Build a Pyramid” etc. Children should understand that in order for this algorithm to be successful the sequence must remain the same each time.</p>
EXS	<ul style="list-style-type: none"> <li>Read, design, write and debug a <b>program</b> to simulate physical systems.</li> <li>I can plan and run a <b>sequence</b> of simple commands.</li> </ul>	<ul style="list-style-type: none"> <li>Can use <u>evaluation</u> to ensure their program follows a precise <b>sequence</b> and identify ways of improving their program.</li> </ul>	<p>Examples could be - an animated retelling of the story using Scratch Jr or Tynker ensuring the instructions are following the correct sequence.</p>
WTS	<ul style="list-style-type: none"> <li>Read, design and write <b>programs</b> to achieve specific goals on a range of devices and applications.</li> <li>I know what a <b>command</b> and a <b>sequence</b> is.</li> </ul>	<ul style="list-style-type: none"> <li>Can use <u>evaluation</u> to ensure their program follows a simple <b>sequence</b>.</li> </ul>	<p><a href="#">BBC What is Sequencing?</a></p>

	Key Vocabulary	Apps	Breakdown
 <p>Programming</p>	<p>Programming is the process of designing and writing a set of simple instructions (a program) in a language it understands.</p>		<p>Continuing on from Year 2 children should be developing more complex programs using sequence; this can be done using Scratch Jr and Tynker. Children could copy or draw Woolly Mammoths and animate a set of sequential instructions, for washing a Woolly Mammoth – this could then be recorded and uploaded to YouTube to give a real audience.</p> <p>Y3’s second or summer project could be completed on Tynker to expose children to the format and help aid them in programming apps for Y4 – this could be an animated game or quiz.</p> <p>Children can move from Scratch Jr to Scratch online for individual projects to add extra challenge and to bridge the gap between Y3 to Y4.</p>
 <p>Sequence</p>	<p>Sequence based algorithms follow a specific set of instructions e.g. to draw a hexagon in scratch if not in sequence the algorithm would not be successful.</p>		
 <p>Evaluation</p>	<p>Evaluation is making judgements, where possible in an objective and systematic way. Judging the quality and effectiveness of products, solutions.</p>		

NC KS2 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

