Pinner Wood School

Year Group	2	Term	Autumn 2	Subject	Computing	Topic	Programming: My Robot Helper
						Key Question	Can I programme, my Robot Helper
Prior Learning and other Curriculum Links	**Year 1:** • I understand the sequence of algorithms is important • I know how to debug simple algorithms • I know how to create a simple program on a digital device e.g. Bee Bot or tablet • I know how to use sequence in programs • I know how to locate and fix bugs in my program.					**Skills statements**	• I know how to write algorithms for everyday tasks • I know how to use logical reasoning to predict the outcome of algorithms • I understand decomposition is breaking objects/processes down • I know how to debug algorithms • I understand programs follow precise instructions • I know how to create programs using different digital devices E.g. Bee Bot or ScratchJr on a tablet • I know how to debug programs of increasing complexity • I know how to use logical reasoning to predict the outcome of simple programs
Fundamentals	I understand programs follow precise instructions I can create programs using different digital devices. I can debug programs of increasing complexity I can use logical reasoning to predict the outcome of simple programs					**Key Facts/Sticky Knowledge**	An algorithm is simply a set of steps used to complete a specific task. All programs follow precise instructions called and algorithm. Programmes can be created using various digital devices. Fixing issues/problems within a program is called debugging

<table>
<tr><td>Our Curriculum Journey</td><td colspan="3">Journey:
D - Design: Pupils start to discuss the desired outcome for their project and are given time to tinker with the software before planning what they will do to achieve their outcome.

A - Apply: Pupils are given the opportunity to create, make and produce content using the app or software explored in the Design lesson(s)

R - Refine: Pupils spend time considering ways to modify and improve their projects to get the best results possible.

E – Evaluate: Upon completing their desired outcome, pupils are given the opportunity to reflect and consider how effectively they have achieved their goal.

S - Share: Learners are given the opportunity to publish and exhibit their work to the world embedding skills from the Digital Literacy curriculum

This computing children will focus on designing a 'Robot Helper' to complete any chores or jobs they might have to do around the house! They will write the algorithms for these robots. When pupils come to the 'Apply' stage, they will test their algorithms and create simple programs in Scratch to be the 'voice of their robots'.</td></tr>
<tr><td>Key Vocabulary (revisited)</td><td>Algorithm, sequence, order, bug, fix, precise, Digital, program, follow, code,
bugs, fix, order, ScratchJr</td><td>Key Vocabulary (new)</td><td>Decomposition, debug, reason, detail, breakdown, task, Precise, logical
reasoning, prediction, debug, sequence</td></tr>
<tr><td>Expected Examples:</td><td colspan="3">  </td></tr>
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