

Title: Cargo control Programs: Cargo Bot and Tellagami		Year: 4 Duration:
Teaching Ideas	Subject	National Curriculum Objectives
<ul style="list-style-type: none"> • What do you know about algorithms/instructions? Model key difference between them by explaining that algorithm is a computer version of an instruction. In partners children to give a simple instruction. Pick a group that was not direct e.g. 'Go outside' – To do this you must walk, turn a door handle, open the door etc. What allows us to do this even though the instructions were not fully detailed? Reinforce that our mind can make its own judgement and reprocess things. Computers can't therefore algorithms (computer instructions) must be perfect with no margin for error or abstract instructions. • Introduce Cargo Bot app – cover basic overview e.g. accessing app, functions to select/delete instruction – aim of the programme. Allow ch to work through first level – only let the children complete successfully once. Children write down score and screen shot instructions used. Why do you get different scores even though the objective was completed? Compare instructions – which was the most precise and why? Link back to notion of human opening a door. • Cargo Bot with repetition – Work through advanced levels that require repetition to achieve the goal. How does this repetition work? • Cargo Bot with repetition and selection – Ch to create an algorithm that requires repetition of specific parts. 	<p>Computing <u>Resources</u></p> <p>I-Pads with Cargo Bot app</p> <p><u>Key vocab</u></p> <p><u>Algorithm</u> – an instruction/direction which achieves a goal</p> <p><u>Program</u> – when a algorithm/instruction is inputted on a digital device</p> <p>Repetition – programming certain codes to repeat to create more efficient algorithms</p>	<ul style="list-style-type: none"> • To use repetition in programs • To use selection in programs • To solve problems by decomposing them into smaller parts • Use logical reasoning to explain how some simple algorithms work.