

Title: A.L.E.X Programs: A.L.E.X (play)		Year: 3 Duration: 1-2 weeks
Teaching Ideas	Subject	National Curriculum Objectives
<ul style="list-style-type: none"> • Check children understands of algorithms. Can they remember that they are a set of instructions? Recap that when an algorithm is on a device it is known as a program. Can children remember when they have used an algorithm before? Model asking a child to move from A to B. Ensure they realise that this is an algorithm. • Introduce ALEX app to children. Model using the app on the easiest level. Model writing the instruction on the board and then input the algorithm. • Each child to have a screen shot from the app in their books. Differentiated on level complexity. Children to write the algorithm in their books to help ALEX to complete the level. Children to then input algorithm and see if it is correct. Children to practise on a few levels like this. • Progress from KS1 to debugging Play A.L.E.X solving incorrect algorithms. All children to be a given a screen shot from the app. Teacher to give each child an incorrect algorithm. Children to input algorithm and work out which bit is wrong. (Initially to be modelled on the IWB). Explain to children that this is debugging i.e. finding the • Children to create their own levels on ALEX. Children to create their own level and choose variable to be placed on the level. Children to then write and test an algorithm for their level. Algorithms to be checked by peers and debugged where necessary. 	<p>Computing</p> <p>Links to: Mathematical vocabulary – position, direction and motion.</p> <p><u>Key vocab</u> <u>Algorithm</u> – an instruction/direction which achieves a goal</p> <p><u>Program</u> – when an algorithm/instruction is inputted on a digital device</p> <p><u>De-bugging</u>- Finding and removing bugs (problems) in a given programme.</p>	<ul style="list-style-type: none"> • To use sequence in programs • To work with various forms of Input • To be able to debug programs to accomplish specific goals • To work with various forms of Output • Work with variables.

