

Learning graph KS4 – Computer systems Boolean logic and how computers work

Lesson Lesson Lesson Lesson Lessons 10 Differentiate between a Describe the role of system software as part of a computer high-level and low-level language system Discover the logic gates AND, NOT, and OR, including their Determine that assembly Construct truth tables for a language has a 1:1 relationship three-input logic circuit symbols and their truth tables with machine code Explain the basic commands in Design a logical circuit, the LMC's assembly code Write a Boolean expression to Design and write your own combining logic gates to solve a describe a logical circuit program in assembly language problem INP, OUT, STA, LDA, ADD, SUB, and BRP Describe the role of each part Learn how logic gates are used of the CPU as part of in carrying out computation fetch-decode-execute cycle Key: Concept Skill Links: Understand the roles and Describe how combinations of Direct prerequisite purpose of each component of logic units can perform the CPU in computation arithmetic operations Scaffolding not direct prerequisite

