

NC OBJECTIVES	KEY KNOWLEDGE AND VOCABULARY
<ul style="list-style-type: none">• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit• compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches• Use recognised symbols when representing a simple circuit in a diagram. <p><u>Working Scientifically</u></p> <ul style="list-style-type: none">• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary• taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate• recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs• using test results to make predictions to set up further comparative and fair tests• reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations• Identifying scientific evidence that has been used to support or refute ideas or arguments.	<ul style="list-style-type: none">• Know what the main components of a circuit are• Know the difference between a series and parallel circuit• Know how to construct a working circuit• Know how to accurately draw a circuit• Know ways in which the brightness of a bulb or speed of a motor can be changed• Know that the brightness of a bulb or speed of a motor depends on how much power is supplied to each component• Know that bulbs and motors will blow out if too high a voltage is used• Know and use conventional symbols for circuits• Know how changing the wire in a circuit can affect the brightness of a bulb• Know how wires of different lengths, thicknesses and material can affect the brightness of a bulb• Know how to identify and fix a circuit that is not working