

# Year 7: Assessment statements

## Subject: Computer Science



	Computational Thinking	Data Processing and Representation	Hardware and Software	Logic
<p><b>Mastering</b></p> <p>(Indicative of student who will go on to achieve a grade 7-9 at GCSE, if they continue to progress as they are).</p>	<ul style="list-style-type: none"> <li>- Shows some independence in using a range of programming structures to solve problems.</li> <li>- Able to apply these structures appropriately and efficiently to solve problems.</li> <li>- Is able to compare algorithms and identify differences.</li> <li>- Code is clearly laid out and makes use of annotation to describe the ideas used.</li> </ul>	<ul style="list-style-type: none"> <li>- Shows a secure understanding of the fetch execute cycle and how this relates to computer hardware.</li> <li>- Has good understanding of how and why computers use binary to process and represent data.</li> <li>- Can carry out some of binary calculations.</li> <li>- Able to describe how computers represent different data types using binary.</li> </ul>	<ul style="list-style-type: none"> <li>- Able to securely describe the difference between hardware and software using examples.</li> <li>- Can describe the purpose of some hardware components.</li> <li>- Can identify the role and uses of some types of software and provide examples.</li> <li>- Is able to describe basic networking technology.</li> </ul>	<ul style="list-style-type: none"> <li>- Shows a secure understanding of what Boolean logic is and its role in computer science.</li> <li>- Can apply the and/or/not functions and evaluate the outcome.</li> <li>- Can make some use of logic within solving computational problems.</li> </ul>
<p><b>Advancing</b></p> <p>(Indicative of student who will go on to achieve a grade 5-6 at GCSE, if they continue to progress as they are).</p>	<ul style="list-style-type: none"> <li>- Developing the use, with support, of a range of programming structures to solve problems.</li> <li>- Shows some ability to apply these structures appropriately to solve problems.</li> <li>- Is able to compare algorithms.</li> <li>- Code is reasonably laid out and makes use of annotation to describe the ideas used.</li> </ul>	<ul style="list-style-type: none"> <li>- Is developing an understanding of the fetch execute cycle and can relate it to computer hardware.</li> <li>- Has some understanding of how and why computers use binary to process and represent data.</li> <li>- Can carry out some of binary calculations.</li> <li>- Able to state how computers represent different data types using binary.</li> </ul>	<ul style="list-style-type: none"> <li>- Able to describe the difference between hardware and software.</li> <li>- Can state the purpose of some hardware components. Can identify the role and uses of some examples of software.</li> <li>- Is able to describe limited networking technology.</li> </ul>	<ul style="list-style-type: none"> <li>- Is developing an understanding of what Boolean logic is and its role in computer science.</li> <li>- Can use the and/or/not functions.</li> <li>- Can make limited use of logic within solving computational problems.</li> </ul>
<p><b>Securing</b></p> <p>(Indicative of student who will go on to achieve a grade 3-4 at GCSE, if they continue to progress as they are).</p>	<ul style="list-style-type: none"> <li>- Beginning to make use of a range of programming structures to solve problems.</li> <li>- Able to apply some of these structures to solve problems.</li> <li>- Is able to compare algorithms.</li> <li>- Sequences of code are logical and includes some annotation.</li> </ul>	<ul style="list-style-type: none"> <li>- Shows a basic understanding of the fetch execute cycle and tries to relate it to computer hardware.</li> <li>- Has a basic understanding of how and why computers use binary to process data.</li> <li>- Able to state how computers represent different data types using binary.</li> </ul>	<ul style="list-style-type: none"> <li>- Can state the difference between hardware and software.</li> <li>- Can state the purpose of limited hardware components.</li> <li>- Can identify the uses of some examples of software.</li> <li>- Is able to identify limited networking technology.</li> </ul>	<ul style="list-style-type: none"> <li>- Shows limited understanding of what Boolean logic is and its role in computer science.</li> <li>- Can identify and/or/not functions.</li> <li>- Can make limited use of logic within solving computational problems.</li> </ul>
<p><b>Foundation</b></p> <p>(Indicative of student who will go on to achieve a grade 1-2 at GCSE, if they continue to progress as they are).</p>	<ul style="list-style-type: none"> <li>- With support, is beginning to make use of a range of programming structures to solve simple problems.</li> <li>- Sequences of code are logical and includes limited annotation.</li> </ul>	<ul style="list-style-type: none"> <li>- Shows a basic awareness of the fetch execute cycle.</li> <li>- Has a basic understanding of how and why computers use binary.</li> <li>- Is aware that computers represent different data types using binary.</li> </ul>	<ul style="list-style-type: none"> <li>- Can state what hardware and software are.</li> <li>- Can name some hardware components.</li> <li>- Can name some examples of software.</li> <li>- Can state what a network is used to do.</li> </ul>	<ul style="list-style-type: none"> <li>- Is aware of what Boolean logic is.</li> <li>- Can identify and/or/not functions.</li> </ul>