

TECHNOLOGY FACULTY – COMPUTING  
YEARS 7 & 8

<i>Topic(s) covered</i>	<i>Resources available e.g. Website</i>
<p>Understanding Computers – Architecture, processing &amp; storage and binary mathematics. Networks – principles of local and wide area networks. Programming in Python, Control Systems with Flowol and Arduino. Generating algorithms to manage traffic signals in a model environment. E-Safety is taught as part of Learning for Life.</p>	<p><a href="http://www.safetyonline.com">www.safetyonline.com</a>  <a href="http://www.thinkuknow.co.uk">www.thinkuknow.co.uk</a>  <a href="http://www.google.co.uk/goodtoknow">www.google.co.uk/goodtoknow</a>            Arduino IDE            Arduino microcontroller kits            Flowal – flowchart control software            Worksheets            Arduino.cc/en/main/Arduino Starter kit</p>

TECHNOLOGY FACULTY – COMPUTING  
YEAR 9

Students must use computers confidentially, safely and effectively. Students will build computational skills such as designing, basic algorithms and problem solving. They will design and create an app for an android mobile phone using Apps Inventor.

<i>Year Topic(s) covered</i>	<i>Resources available e.g. Website</i>
<p>Hardware – In-depth knowledge and understanding of components and their function. Software – functions of the operating system, types of application, system and utility software in different contexts. Logic, Binary numbers, logic gates and sequencing of instructions into a logical order.</p> <p>Programming project where students will be expected to plan, write, test and evaluate a simple program using Python.</p> <p>Trends in computing – Students are to research a computing related technology (such as mobile phones, social networks). They will then communicate these findings through a presentation/report.</p>	<p>Raspberry Pi.</p>