

## S2 Computing Science

Week	Content	Homework
1 June	<b>Computer Graphics</b> <ul style="list-style-type: none"> <li>Making complex shapes by adding and subtraction vectors</li> <li>Cat Boy Poster</li> <li>Cat Boy Poster</li> </ul>	
2 June	<b>Computer Graphics</b> <ul style="list-style-type: none"> <li>Using textures and applying special effects( filters, shadow and roughen tool)</li> <li>Creating a treasure map</li> <li>Creating a treasure map</li> </ul>	
3 Aug	<b>Computer Systems</b> <ul style="list-style-type: none"> <li>Input – process – Output</li> <li>Units for data (bits, bytes, kilobytes, megabytes, gigabytes)</li> <li>Parts of the computer including CPU and memory</li> </ul>	
4 Aug	<b>Computer Systems</b> <ul style="list-style-type: none"> <li>Input Devices (scanner, keyboard, graphics tablet, digital camera, webcam)</li> <li>Output Devices (laser and inkjet printer, TFT monitors, loud speakers)</li> <li>Input/Output e task</li> </ul>	<b>Homework 1</b>
5 Aug	<b>Computer Systems</b> <ul style="list-style-type: none"> <li>Backing Store (hard disc, CDR, DVDR, USB Flash drive.</li> <li>Application Software and systems software</li> <li>What is an emerging technology?</li> </ul>	
6 Sep	<b>Computer Systems</b> <ul style="list-style-type: none"> <li>Selecting the correct hardware – Project</li> <li>Selecting the correct hardware – Project</li> <li>Selecting the correct hardware - Project</li> </ul>	
7 Sep	<b>Microbit</b> <ul style="list-style-type: none"> <li>Introduction to microbit(parts of the microbit and using the block editor</li> <li>Using the display</li> <li>Variables and inputs from sensors</li> </ul>	<b>Homework 2</b>
8 Sep	<b>Microbit</b> <ul style="list-style-type: none"> <li>More complex programs</li> <li>Mini Project</li> <li>Mini Project</li> </ul>	
9 Sep	<b>Computer Animation</b> <ul style="list-style-type: none"> <li>What is animation? History of animation (thaumatrope,</li> </ul>	

	zoetrope) <ul style="list-style-type: none"> <li>• practical pair/group work on making thaumatrope /flip book).</li> <li>• Introduction to gif animations using pivot</li> </ul>	
10 Oct	<b>Computer Animation</b> <ul style="list-style-type: none"> <li>• Intro to stopframe animation using Drawplus</li> <li>• Use cameras to create stop frame animation</li> <li>• Use cameras to create stop frame animation</li> </ul>	<b>Homework 3</b>
11 Oct	<b>Computer Animation</b> <ul style="list-style-type: none"> <li>• Keyframe animation using Drawplus</li> <li>• Keyframe animation using Drawplus</li> <li>• Mini project on Keyframe animation</li> </ul>	
12 Oct	<b>Computer Animation</b> <ul style="list-style-type: none"> <li>• Animation Practical Tasks</li> <li>• Animation Practical Tasks</li> <li>• Animation Practical Tasks</li> </ul>	
13 Nov	<b>WWW and The Internet</b> <ul style="list-style-type: none"> <li>• Anatomy of a webpage, hyperlinks and hotspots</li> <li>• Hardware and software required</li> <li>• Introduction to HTML</li> </ul>	<b>Homework 4</b>
14 Nov	<b>WWW and The Internet</b> <ul style="list-style-type: none"> <li>• TAGs in HTML</li> <li>• Using HTML to create websites</li> <li>• Using HTML to create websites</li> </ul>	
15 Nov	<b>WWW and The Internet</b> <ul style="list-style-type: none"> <li>• Using HTML to create websites</li> <li>• Investigation on emerging communication technology</li> <li>• Investigation on emerging communication technology</li> </ul>	<b>Written Test</b>
16 Nov	<b>Computer Security and staying safe Online</b> <ul style="list-style-type: none"> <li>• How safe are you online?</li> <li>• Computer Security and passwords/biometrics</li> <li>• Firewalls and hacking</li> </ul>	<b>Homework 5</b>
17 Dec	<b>Computer Security and staying safe Online</b> <ul style="list-style-type: none"> <li>• Computer viruses and phishing</li> <li>• Computer related laws</li> <li>• Design and Create Website on Internet Safety and ethical and environmental issues</li> </ul>	
18 Dec	<b>Computer Security and staying safe Online</b> <ul style="list-style-type: none"> <li>• Design and Create Website on Internet Safety and ethical and environmental issues</li> <li>• Design and Create Website on Internet Safety and ethical and environmental issues</li> <li>• Design and Create Website on Internet Safety and</li> </ul>	

	ethical and environmental issues	
19 Dec	<b>Computer Security and staying safe Online</b> <ul style="list-style-type: none"> <li>• Design and Create Website on Internet Safety and ethical and environmental issues</li> <li>• Design and Create Website on Internet Safety and ethical and environmental issues</li> <li>• Design and Create Website on Internet Safety and ethical and environmental issues</li> </ul>	<b>Homework 6</b>
20 Jan	<b>Database</b> <ul style="list-style-type: none"> <li>• Introduction to flat file database (structure)</li> <li>• Field types and creating first access table</li> <li>• Using filters to find information quickly</li> </ul>	
21 Jan	<b>Database</b> <ul style="list-style-type: none"> <li>• Sorting a database</li> <li>• Problem solving using access database</li> <li>• Problem solving using access database</li> </ul>	
22 Jan	<b>Database</b> <ul style="list-style-type: none"> <li>• Formatting and creating a database</li> <li>• Using queries</li> <li>• Output using reports</li> </ul>	<b>Homework 7</b>
23 Jan	<b>Database</b> <ul style="list-style-type: none"> <li>• Database Practical Task</li> <li>• Database Practical Task</li> <li>• Database Practical Task</li> </ul>	
24 Feb	<b>Programming in VB.Net</b> <ul style="list-style-type: none"> <li>• User interface and the form and toolbox</li> <li>• Working with text and variables</li> <li>• Practical work</li> </ul>	
25 Feb	<b>Programming in VB.Net</b> <ul style="list-style-type: none"> <li>• User interface and the form and toolbox</li> <li>• Working with text and variables</li> <li>• Practical work</li> </ul>	<b>Homework 8</b>
26 Feb	<b>Programming in VB.Net</b> <ul style="list-style-type: none"> <li>• Types of variables</li> <li>• Arithmetic and concatenating text and variables</li> <li>• Practical work</li> </ul>	
27 Feb	<b>Programming in VB.Net</b> <ul style="list-style-type: none"> <li>• Naming conventions with objects</li> <li>• Using Inputbox for input</li> <li>• Practical work</li> </ul>	
28 Mar	<b>Programming in VB.Net</b> <ul style="list-style-type: none"> <li>• Simple selection using the IF statement</li> <li>• Practical work</li> <li>• Using conditional loops</li> </ul>	<b>Homework 9</b>

<b>29 Mar</b>	Programming in VB.Net <ul style="list-style-type: none"> <li>• Practical work</li> <li>• Using Fixed loops</li> <li>• Practical work</li> </ul>	
<b>30 Mar</b>	Programming in VB.Net <ul style="list-style-type: none"> <li>• Practical assessment "Scotland's got Talent" – this covers aspects of level 3 and 4 Outcome for programming</li> <li>• Practical assessment "Scotland's got Talent"</li> <li>• Practical assessment "Scotland's got Talent"</li> </ul>	<b>Written Test</b>
<b>31 Mar</b>	Programming in VB.Net <ul style="list-style-type: none"> <li>• Practical assessment "Scotland's got Talent"</li> <li>• Practical assessment "Scotland's got Talent"</li> <li>• Practical assessment "Scotland's got Talent"</li> </ul>	<b>Homework 10</b>
<b>32 April</b>	Programming in VB.Net <ul style="list-style-type: none"> <li>• Practical assessment "Scotland's got Talent"</li> <li>• Practical assessment "Scotland's got Talent"</li> </ul> Practical assessment "Scotland's got Talent"	
<b>33 April</b>	3D Games Design <ul style="list-style-type: none"> <li>• Active Props and special effects</li> <li>• Practical Problem Solving</li> <li>• Using rules with active props and doors</li> </ul>	
<b>34 May</b>	3D Games Design <ul style="list-style-type: none"> <li>• Haunted house and Sewer pipe task</li> <li>• Active Props and special effects</li> <li>• Using rules with active props and doors</li> </ul>	<b>Homework 11</b>
<b>35 May</b>	3D Games Design <ul style="list-style-type: none"> <li>• Characters and volume triggers</li> <li>• Pickups and media</li> <li>• Design and create a game</li> </ul>	
<b>36 May</b>	3D Games Design <ul style="list-style-type: none"> <li>• Design and create a game</li> <li>• Design and create a game</li> <li>• Design and create a game</li> </ul>	
<b>37 May</b>	3D Games Design <ul style="list-style-type: none"> <li>• Design and create a game</li> <li>• Design and create a game</li> </ul> Design and create a game	