

|  | Software or hardware   | Websites   |
|--|--|--|
| 8.1 – Developing for the web                 | <ul> <li>A plain text editor for writing HTML and CSS<br/>(eg Windows Notepad, or Repl.it as an online<br/>alternative)</li> </ul> | www.w3schools.com/css www.w3schools.com/cssef  |
| 8.2 – Representations - from clay to silicon |  | <ul> <li>scratch.mit.edu</li> <li>en.wikipedia.org</li> <li>teachinglondoncomputing.org/lego-braille</li> <li>csunplugged.org/en</li> <li>csfieldguide.org.nz/en</li> <li>archive.org/details/advancementofl00baco/page/256</li> <li>curriculum.code.org</li> <li>www.cs4fn.org</li> <li>apcentral.collegeboard.org/pdf/ap-computer-science-principles-course-and-examdescription.pdf?course=ap-computer-science-principles</li> <li>denninginstitute.com/pjd/GP/GP-site/welcome.html</li> <li>www.youtube.com/watch?v=1GSjbWt0c9M&amp;list=PL8dPuuaLjXtNIUrzyH5r6jN9ullgZBpdo&amp;index=6&amp;t=0s</li> <li>www.futurelearn.com/courses/how-computers-work</li> </ul> |



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| 8.3 – Mobile app development      | App Lab from Code.org (pupils will need<br>accounts, which can be <u>created by the teacher</u><br>in advance)  | <ul> <li>code.org/educate/applab</li> <li>support.code.org/hc/en-us/articles/115000488132-Creating-a-classroom-section</li> <li>www.youtube.com/watch?v=EhkxDlr0y2U</li> <li>www.youtube.com/watch?v=e1St8LB4VJA</li> <li>www.youtube.com/watch?v=fypSGGZZfzM</li> </ul>  |
| 8.4 – Media - Vector graphics     | ■ Vector graphics editor (the resources in this unit have been written for Inkscape, which is open source and cross-platform: <a href="inkscape.org">inkscape.org</a> ) | ■ inkscape.org  |
| 8.5 - Layers of computing systems |   | <ul> <li>scratch.mit.edu</li> <li>www.computerhistory.org</li> <li>teachinglondoncomputing.org/resources/inspiring-unplugged-classroom-activities/ the-intelligent-piece-of-paper-activity</li> <li>thecrashcourse.com/courses/computerscience</li> <li>www.youtube.com/watch?v=5ocq6_3-nEw</li> <li>jessecrossen.github.io/ttsim</li> <li>www.khanacademy.org/computing/computer-science#how-computers-work</li> <li>en.wikipedia.org</li> <li>youtu.be/DFBbSTvtpy4</li> <li>youtu.be/CO67EQ0ZWgA</li> </ul> |



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|---|--|--|
| 8.5 – Layers of computing<br>systems (cont.)    |  | <ul> <li>youtu.be/n-zeeRLBgd0</li> <li>teachablemachine.withgoogle.com</li> <li>experiments.withgoogle.com/collection/ai</li> <li>quickdraw.withgoogle.com</li> <li>machinelearningforkids.co.uk</li> <li>projects.raspberrypi.org</li> <li>code.org/oceans</li> <li>royalsociety.org</li> </ul> |
| 8.6 – Introduction to Python programming        | ■ Python (we recommend the Mu IDE for desktop, or Repl.it for cloud-based) | <ul> <li>repl.it</li> <li>blog.teachcomputing.org/tag/pedagogy</li> <li>pythontutor.com/visualize.html</li> <li>trinket.io</li> <li>projects.raspberrypi.org</li> <li>docs.python.org/3</li> </ul>   |
| 9.1 – Python programming with sequences of data | ■ Python (we recommend the Mu IDE for desktop, or Repl.it for cloud-based) | <ul> <li>□ repl.it</li> <li>□ blog.teachcomputing.org/tag/pedagogy</li> <li>□ pythontutor.com/visualize.html</li> <li>□ trinket.io</li> </ul>  |