

6-A-Day – Computer Science GCSE (p1.1-2016)

Q1

Ann wants to purchase a new computer and is looking at two models. The specification of the CPU in each computer is shown in Fig. 1.

Fig. 1

Computer 1	Computer 2
Clock Speed: 1 GHz	Clock Speed: 1.4 GHz
Cache size: 2 MB	Cache size: 2 MB
Number of Cores: 4	Number of Cores: 2

(a) When running a 3D flight simulator, Computer 1 is likely to run faster than Computer 2.

Using the information in Fig. 1, identify **one** reason for this.

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.....

[1]

Q2

(b) Identify **two** internal components that are not in Fig. 1, which could improve the performance of the computers.

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[2]

Q3

(c) Explain **one** reason why the cache size affects the performance of the CPU.

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[2]

The questions on this worksheet have been taken from the Original OCR GCSE Computer Science Specimen Paper

Q4	<p>(d) Identify four events that take place during the fetch-execute cycle.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>[4]</p>
Q5	<p>Vicky has been on holiday and has taken lots of photos. The memory in her camera is now full and she needs to transfer her photos to an external secondary storage device.</p> <p>(a) Define what is meant by 'secondary storage'.</p> <p>.....</p> <p>.....</p> <p>[1]</p>
Q6	<p>(b) Identify the three common storage technologies Vicky can choose from.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>[3]</p>