Target for this cycle Choose an item.

Name:Click here to enter text.

**A computer system**

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| |  |  |  | | --- | --- | --- | | **Define a computer - fill in the in diagram** | | | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  St  Pr  I | | | | **Input Devices** | | | | Image | Name | More Detail | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | **Explain what an input device is and why they are needed.** | | | |  | | | | **Output Devices** | | | | Images | Name | More Detail | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | **What is an OUTPUT? Why I are they needed?** | | | |  | | | | **Storage Devices and Communication Devices** | | | | Image | Photo | More detail. | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

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| Image result for AQA logo**Exam Questions.**   |  | | --- | |  | | 1. **State what is meant by a storage device, an input device and an output device in a computer system. [3]** | | Storage Device:  Input Device:  Output Device: | | 1. **A shopping centre uses several remote-controlled CCTV cameras for security. An operator uses a computer to watch, control and record the output of the cameras.**   **State an input, output and storage device which will be needed by the computer. For each, explain the reason why it is needed. [9]** | | * Input device -   Reason -   * Output Device -   Reason -   * Storage Device-   Reason - | |

**So what is inside a computer?**

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| |  |  |  |  | | --- | --- | --- | --- | | **Define hardware** | | **Define internal Hardware** | | |  | |  | | | **Summary of Internal Components** | | | | | Image | Name | | Main Role | |  |  | |  | |  |  | |  | |  |  | |  | |

**Lets look a little deeper.**

**The CPU**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  |  |  |  | | --- | --- | --- | --- | | **CPU stands for** | | **Define it.** | | |  | |  | | | **The Fetch Decode and Execute Cycle** | | | | |  | | | | | Image result Who is John Von Neumann? | | What did he develop? | | |  |  |  | | | Tell me more? | | |  | | | Von Neuman Archiecture | | | | | **CPU**  Cache | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | | Factors that determine the **Performance of the CPU** | | | | |  | | | | |
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| **Exam Questions.**   |  | | --- | | Image result for AQA logo | | 1. C:\Users\PThornton\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\IG5I9SI2\481px-Ada_Lovelace_1838[1].jpg **Jo buys a notebook computer which has a 3MHz quad-core central processing unit (CPU).**   **C:\Users\PThornton\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\AEWXH6AP\AlanTuring[1].jpgState the purpose of the CPU. [1]**  **State the purpose of the CPU and explain how it works with memory to do this. [3]** | |  | | 1. C:\Users\PThornton\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\IG5I9SI2\481px-Ada_Lovelace_1838[1].jpg**Describe what is meant by**   **3MHz CPU**  **quad-core CPU**  C:\Users\PThornton\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\AEWXH6AP\AlanTuring[1].jpg**2. Describe what is meant by the following and describe with the use of a 3rd example how these impact on performance of computer**  **3MHz CPU**  **quad-core CPU** | | C:\Users\PThornton\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\AEWXH6AP\AlanTuring[1].jpgC:\Users\PThornton\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\IG5I9SI2\481px-Ada_Lovelace_1838[1].jpg**Describe the fetch decode execute cycle.**  **Explain the fetch decode execute cycle, using the Von Neumann Architecture** | |  | |

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| |  |  |  | | --- | --- | --- | | **RAM stands for** | **What does it do? What data does it hold?** | **Other key points** | |  |  | Image result for RAM | | **ROM stands for** | **What does it do? What data does it hold?** |  | |  |  |  | | **Cache. What is the point of cache?**  **Describe the Levels** | | | |  | | | | **Volatiltiy** | | | |  | | | | **RAM vs ROM** | | | | RAM | | ROM | |  | |  | |  | |  | |  | |  | |  | |  | |

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| Image result for AQA logo **Exam Questions**   |  | | --- | |  | |  | |  | |  | |  | |  | |

**Lets look a little deeper.**

**Memory (primary storage)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  |  |  |  | | --- | --- | --- | --- | | **Why do we need Secondary Storage?** | | | | |  | | | | | **Magentic Discs** | | | | | Image | Examples of | Key Advantages | | |  |  |  | | | Key Disadvantages | | |  | | | **How it works.** | | | | |  | |  | | | **Optical Drive** | | | | | **Image** | **Examples of** | | Key Advantages | |  |  | |  | | Key Disadvantages | |  | | **Solid State** | | | | | **Image** | **Examples of** | | **Key Advantage** | |  |  | |  | | **Key Disadvtages** | |  | |

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| Image result for AQA logo **Exam Questions**   |  | | --- | |  | |  | |  | |  | |  | |  | |