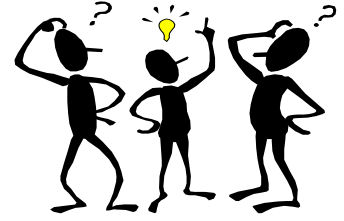


## Memory Management

Use the theory notes on the teach-ict.com website to help you answer the questions below. Try to write the answers in your own words.



### Questions

1. What is meant by the term, 'primary memory'?

2. What is the difference between 'main memory' and 'primary memory'?

3. How much main memory would a typical home computer contain?

4. Primary memory can also be found inside the CPU. What are these areas of memory called?

5. What is meant by the term, 'secondary memory'?

6. what is the difference between 'secondary memory' and 'secondary storage'?

7. Identify three reasons as to why it is important to manage memory within a computer system.

8. In your own words, explain why it is a good idea to partition a hard disk. Give an example of disk partitioning.

9. What is the 'memory manager'?

10. Which type of memory is segmented?

11. In your own words explain the purpose of segmentation

12. Identify the names of the four parts of a segment into which an application will be loaded. Explain what is stored in each part of the segment.

13. In your own words explain the purpose of 'virtual memory' and describe how it works.

14. Identify a benefit of virtual memory

15. Identify a disadvantage of virtual memory.

16. In your own words, explain the term 'paging'

17. What is the purpose of a 'page table'?

18. Explain why it is a good idea for pages to be of the same size as hard disk sectors.

19. Using an example, explain what is meant by the term 'offset'

20. Identify three similarities between paging and segmentation

21. Identify two differences between paging and segmentation

22. Explain what is meant by the term 'disk thrashing'

23. What happens during 'disk thrashing'?

24. List three other problems that can occur when using memory

25. What was the extra fact that you found out for yourself about segmentation?

26. What was the extra fact that you found out for yourself about virtual memory?

27. What was the extra fact that you found out for yourself about paging?

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