

Module 1.2 Hardware devices

Written module activity

Input: scanners and digital cameras

18. Give five general advantages of having hard copies scanned and saved in digital format in the context of a business or office environment.
19. Give two scenarios where it is preferable to use RFID tags instead of conventional barcodes.
20. Your sister has a 10 MP digital camera. Explain how the term 'resolution' relates to this specification.
21. List and describe four factors, other than the resolution, that the quality of an image taken with a digital camera depends on.
22. Do scanners and digital cameras use the same units to measure resolution? Motivate your answer.
23. Most laptop computers have an *integrated* webcam. What does the term 'integrated' mean in this context?

Output: monitors/display devices, speakers/headphones, printers

24. Your father wants to buy a new monitor. He was advised that besides the general specifications such as the size and the resolution he should also look at specifications such as the *aspect ratio*, the *contrast ratio* and the *refresh rate*.
Briefly describe what each of these specifications refers to.
25. Suppose you switch on your computer and there is no display. Give two troubleshooting steps you can take to try to solve the problem.
26. Suppose you have just bought the latest CD of your favourite group. You place the CD in your computer's DVD drive and the media player starts but there is no sound!
Give four troubleshooting steps you can take to try to solve the problem.
27. Give four specifications you might consider when purchasing a new printer, besides the type of printer, the colour factor, the cost and the warranty.
28. What are the three main types of printers?
29. Give a typical scenario where you would use each of the types you gave in the previous question (as opposed to the other two types of printers).
30. Inkjet printers are generally cheaper to buy than laser printers, but they have some disadvantages compared to laser printers. Give three of these disadvantages.
31. How does a 3D printer differ from other types of printers, in terms of what it can print?
32. Besides being slow and expensive, why is it that 3D printers are not common in households?