| Hardware item | Recommendations |
|---|---|
| **Scanner**<br><br>Image scanners capture an image of whatever is placed in the scanner whilst barcode scanners read barcodes. | • Image scanners have lost their popularity because of digital photography. *Personal users* will seldom need a scanner, because they can just as easily photograph the image as scan it.<br>• Any *SOHO* or *power user* who needs to scan documents and convert them into editable text needs a good quality scanner and an OCR program.<br>• If a *SOHO* or *power user* runs a business that deals with images or photos then it is probably a good idea for them to get a good quality scanner to ensure that they can deal with any type of image that people might need them to work with. |

## *Activity*

### *Mobile technologies*

1. Of the mobile technologies listed in this module, identify the technology (or technologies) that would be best suited to the following tasks:
   a) Taking a photo / video
   b) Designing and creating a website
   c) Posting a message to twitter
   d) Quickly checking your e-mail
   e) Reading a book
   f) Watching a movie
   g) Working on a formatted Word document
   h) Quickly booking movie tickets
   i) Navigating from point A to Point B
   j) Using as a second screen for your computer
   k) Listening to your music collection on the go
   l) Making a skype call from the car
   m) Creating a 3D animation
   n) Reading a colour magazine

2. What does 'always on' mean in terms of technology?

3. Which devices have 'always on' technology?

4. Why is 'always on' an advantage in mobile technology?

5. Why is input and interaction easier on a tablet than on a smartphone?

6. A mobile operating system is designed to be 'always on' and so is optimised for conserving power. Why is this feature essential for mobile technologies?

7. Why is having a mobile operating system a bit of a disadvantage (at the moment, Jan 2014)?

8.  List FOUR advantages of mobile devices.

9.  What is the biggest constraint on mobile devices?

10. "Mobile devices would be useless without the Internet". How true is this statement? Discuss.

11. Why is size a constraint on mobile technologies?

12. What does the term *convergence* refer to?

13. Name THREE ways you can conserve the battery power of a smartphone.

## *Factors influencing the performance of a computer*

14  Which TWO aspects of a CPU influence the performance of a computer? Describe each shortly.

15. What is the cheapest and/or simplest way to improve the performance of a computer?

16. How can cache improve the performance of a computer system?

17. What do HDD and SSD stand for?

18. You got a 128 GB SSD as a birthday present but you have more than 2 TB of music and video files on your current HDD. How can you configure your computer to get the best of both worlds?

19. Use Google to find a list of at least FIVE GPU manufacturers.

20. Which TWO aspects of a bus influences its performance?

## *Hardware recommendations*

21. Your aunt has just started a SOHO business and has purchased a multi-function printer.
    Give two typical functions that a multi-function printer will performs, besides normal printing.

22. A friend bought an entry-level desktop with a smallish hard drive and an integrated graphics controller. She wants to record wedding videos and edit them on this PC to earn some money.
    a) Why would it have been a good idea for her to check if the computer had a FireWire or Thunderbolt port?
    b) Explain why a small hard drive will be a problem in terms of using the computer for the editing of videos.
    c) Explain what we mean by the term 'integrated graphics controller'.
    d) Would this 'integrated graphics controller' be adequate for video editing?
       Briefly motivate your answer.

23. Everyone loves a really big monitor, but some people really need them!
    Name two categories of power users that need a big monitor or even multiple monitors to maximise their productivity.

24. Why would a SOHO user make use of OCR software?