



Province of the  
**EASTERN CAPE**  
EDUCATION

**DIRECTORATE SENIOR CURRICULUM MANAGEMENT (SEN-FET)**

**HOME SCHOOLING SELF-STUDY WORKSHEET ANSWER SHEET**

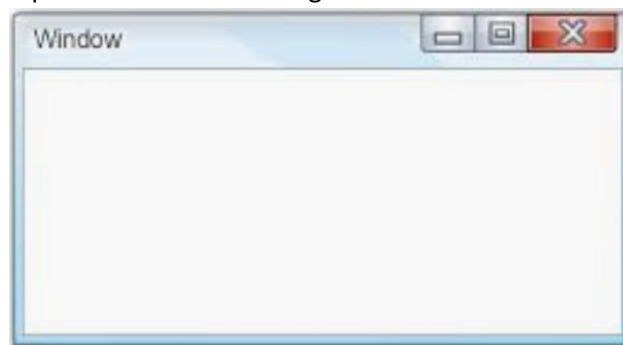
<b>SUBJECT</b>	COMPUTER APPLICATIONS TECHNOLOGY	<b>GRADE</b>	10	<b>DATE</b>	20 TO 31 JULY 2020
<b>TOPIC</b>	SOFTWARE Provided by DBE	<b>TERM 1 TO 4 REVISION</b>		All software covered	

**Level 1**

1. What is software? (2)  
A set of instructions ✓ that tells the computer how to perform a task ✓ )
2. List the two main categories of software (2)  
System software ✓ and Application software ✓
3. What is system software? (3)  
Programs that control and maintain ✓ the operations of the computer ✓ and its devices ✓
4. Name three types of system software (3)  
Operating systems ✓, utilities ✓, device drivers ✓
5. What is application software? (2)  
A self-contained computer program ✓ that performs specific tasks ✓
6. What is an end-user license agreement (EULA)? (3)  
A legal contract ✓ entered into between a software developer or vendor and the user ✓ of the software, specifying rights and restrictions for using the software ✓
7. What is utility software? (2)  
Programs/applications ✓ that enable one to perform maintenance-type tasks ✓
8. What are Windows accessories? (3)  
Small, handy application ✓ that provides a specific function ✓ /that simulate accessories normally found on a desk ✓ such as calculator, sticky notes. Etc.
9. In the context of computers, what is a driver? (3)  
A small program ✓ that enables the operating system to communicate ✓ with a specific device ✓
10. What is a word processor? (2)  
Program/application ✓ that allows one to create text-based documents in digital format ✓

11. In the context of a computer, what is the following? (3)
- a. File (3)  
A named collection✓ of stored data/information/instructions✓ in a storage device✓
  - b. Folder (2)  
Named storage space/virtual location on storage medium✓ that contains files or other folders✓
  - c. Recycle bin (2)  
Folder/location ✓ for files that have been deleted✓
  - d. File Manager (2)  
Tool/small app ✓ that performs functions to manage files✓
  - e. Graphical User Interface (GUI) (2)  
Interface that allows users✓ to interact with electronic devices and applications✓ through graphical elements✓ such as icons, buttons, etc.
  - f. Icon (2)  
A small graphical representation/pictogram ✓ of a program or file✓
  - g. Tile (3)  
A type of shortcut✓ to apps arranged in a grid format✓ that is able to display information in real time from the app they point to✓ without having to open the app, e.g. weather app
12. How does a computer know which program to use to open a file? (2)  
The file extension✓ tells the operating system which software it is associated with✓
13. What is the function of utility software? (4)  
Performs maintenance✓ and management✓ tasks usually related to managing devices, media and programs✓ or that allows you to optimise your system✓
14. State whether the following statements are true or false
- h. Utilities enable you to perform administrative and maintenance type tasks on your computer relating to hardware and software. (1)  
True✓
  - i. Application software control or maintain the operation of the computer and its devices (1)  
False✓
  - j. An operating system coordinates all the activities of the computer (1)  
True✓
  - k. The operating system remains in memory while the computer is running (1)  
True✓
  - l. A disk cleaning app is an example of Windows accessory software (1)  
False✓
  - m. Application software serves as the interface between the user, the apps and the computer's hardware. (1)  
False✓
  - n. Proprietary software is often mass-produced, copyrighted software that meets the needs of a wide variety of users. (1)  
True✓

15. A USB flash drive is hot swappable and plug-and-play. (2)
- a. What is hot swappable/ hot plugging (2)  
Allows one to insert and remove a device ✓ while the computer is running ✓
- b. What is plug-and-play? (3)  
A technology that allows the computer to recognise peripheral devices ✓ and automatically allocate resources to the device ✓ so the user can begin using them immediately after it is connected to the computer ✓
16. In the context of a computer, what is a drive? (2)  
A location (medium) ✓ that is capable of storing and reading information ✓ such a hard drive
17. What is the Recycle Bin (4)  
It is a location (folder) ✓ on the local disk ✓ that holds your deleted files temporarily ✓ so that it can be restored from the recycle bin if accidentally deleted ✓
18. What is the function of a file extension? (6)  
A file extension helps in identifying ✓ the type of data the file holds ✓ and helps an operating system ✓, like Windows to determine which program, ✓ by default, on the computer the file is associated ✓ with/can be used to open it ✓
19. List three GUI elements. (3)  
Windows ✓, Icons ✓, mouse ✓, tabs ✓, pointer, etc. (any three)
20. What is (3)
- a. Digital piracy? (2)  
Unauthorised copying ✓ of copyrighted software ✓, music or films
- b. Copyright? (3)  
Exclusive right ✓ given to the creator of a creative/original work ✓ to reproduce the work ✓
21. What is the function of PDF (Portable Document Format) software? (3)  
It saves documents created in any application ✓ into a common format ✓ that has the same appearance as the original document ✓
22. What is the function of a word processor (2)  
It produces digital, text-based documents ✓ through input, editing, formatting and output of text and other features ✓
23. What are the functions of a file manager? (3)  
Displays a list of files on a storage medium ✓, organising files in folders ✓, copy, rename, delete move and sort files ✓
24. List three actions you can perform in the following window: (3)

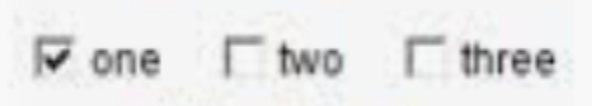

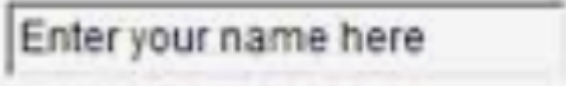
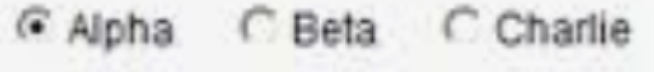



Minimise ✓, maximise ✓, close ✓ also accept move, resize

25. Provide one word/term/concept for each or the following descriptions
- a. Software that performs a specific and useful function to maintain computer resources and increase the efficiency of a computer system (1)  
Utility ✓
  - b. Small, handy programs that perform additional small tasks, such as a calculator (1)  
Accessories ✓
  - c. Software designed specifically to help in the management and tuning of the operating system, computer hardware and application software of a system. (1)  
Utility ✓
  - d. Software that allows you to access and modify the source code (1)  
Open source ✓
  - e. Software that allows users to organise data in columns and rows and perform calculations on the data (1)  
Spreadsheet ✓
  - f. Software that coordinates the activities and functions of hardware and software; control the computer hardware and act as an interface with application programs (1)  
Operating system ✓
  - g. Software that helps to protect a computer system from malware (1)  
Anti-virus ✓
  - h. Software that acts as a translator between the operating system and a device connected to the computer (1)  
Driver ✓
  - i. Software that can be used free of charge, but does not include full functionality (if you want full functionality, you need to pay) (1)  
Shareware ✓
  - j. Software that allows users to create visual aids for presenting and communicating ideas or other information to a group (1)  
Presentation ✓
  - k. Copyrighted software that is distributed for free but where the creator retains the rights to the software (1)  
Freeware ✓
  - l. Software designed to make users more productive and/or assist them with personal tasks (1)  
Application / App ✓

26. Name the following GUI components:

(5)

GUI component	Name
	Checkbox✓
	Drop down list✓
	Textbox✓
	Radio buttons✓
	Button✓

27. What is the function(s) of the following utilities?

- a. Disk cleanup (2)  
Searches for✓ and removes unnecessary files✓ such as temporary files
- b. File compression (2)  
Shrinks the size of a file✓, decompress compressed files✓
- c. Uninstaller (3)  
Removes an application✓ completely✓ (including all associated files and settings) from a device without affecting other programs✓
- d. PC Maintenance (2)  
Identifies and fixes operating system problems✓, detects and repairs drive problems✓, tweaks computer's performance (any 2)
- e. Power Manager (1)  
Monitors device's power usage✓
- f. Backup (3)  
Copies✓ selected files or contents of entire storage medium✓ to another storage location✓ such external hard drive or cloud, usually in compressed form
- g. Restore (2)  
Convert the backed-up files✓ to their original form✓

## Level 2

28. Discuss the differences and similarities between Open Source, freeware, shareware and proprietary software (12)

	Open Source	Freeware	Shareware	Proprietary
<b>Cost</b> ✓✓✓✓	Mostly Free (if purchased, it comes with source code)	Free (unlimited time)	Free for limited period, e.g. 30 days (Freely distributed to users on trial basis)	Not free bound with restrictions regarding use, distribution and modification.
<b>Source Code</b> ✓✓✓✓	Open Users can modify, inspect, customise, enhance it to improve the software	Closed source Do not provide any freedom of modifying, sharing and studying the program	Closed	Closed Purchased without source code
<b>Main advantage / disadvantage</b> ✓✓✓✓	Customisable	No cost for using	Helps try the product before buying it. Free trial – not always full functionality	Cost as it is copyrighted software Requires licence to be able to install

29. Explain why a computer needs device drivers (2)

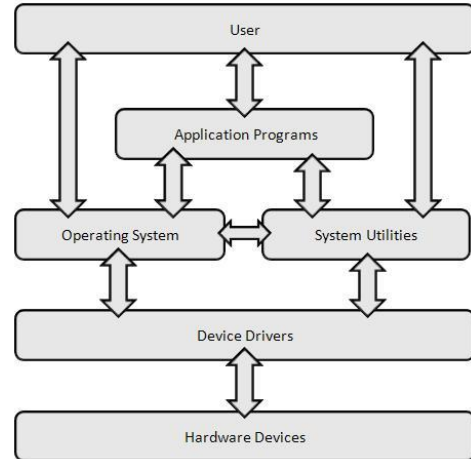
Without drivers, the computer would not be able to send and receive data correctly to hardware devices ✓, and the device may not function properly, if at all ✓

30. Why is file management important? (2)

It ensures arranging and storing documents in an ordered manner ✓ so that they could be found easily when needed ✓

31. Study the graphic and describe how an operating system interacts with the computer (9)

The operating system provides an interface between an application program and the computer hardware, so that an application program can interact with the hardware only by obeying rules and procedures programmed into the operating system. In order to communicate with hardware it needs drivers. The OS controls every task your computer carries out and manages system resources, establish the user interface and execute and provide services for application software.



32. What is the purpose of a software license agreement? (3)

It licenses the software for use by the user under specifying rights and limitations, but does not sell the app to the user.

33. Explain the difference between radio buttons and check boxes (1)

Radio buttons – only 1 can be checked whilst with check boxes more than one can be checked.

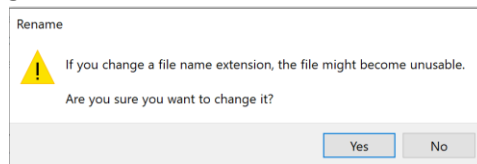
34. Why does one need to install system software on the computer before you can use the computer? (4)

Operating system acts an interface between applications and hardware. It provides a platform and sets rules on how applications communicate with hardware.

35. Why is it important to update software regularly? (3)

Frequent updates help to thwart viruses and other vulnerabilities, rectify software glitches and may include new features.

36. When John renames his assignment file, created in Word, he receives the following message:



a. Explain why this message appears (1)


He accidentally changed the file extension.

b. What will happen if he clicks the Yes-button? Explain your answer (4)

The file will be renamed with no extension and will therefore no longer be associated with Word as in a GUI based operating system, file extensions are associated with “default” applications. When the file extension is changed, a user would therefore no longer just be able to double click the file and have it automatically opened in the appropriate application.

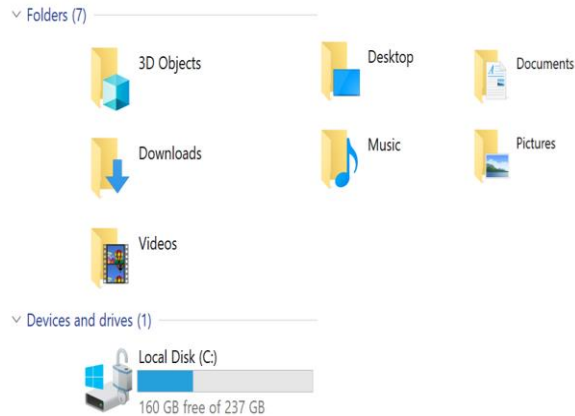
37. In addition to trying to free space on your storage device, for what other reasons might you want to compress files and folders? (2)

Backup, reduce the size to send via email.

38. Describe the similarity(ies) and difference(s) between the following: (4)
- Moving and Copying a file from one folder to another on a flash drive (4)  
 Moving a file removes ✓ the file from the current location/folder and puts it in the new location/folder, so there is only ONE copy of the file ✓, whilst copying a file places a duplicate ✓ of the file in the new location/folder, so there is two copies of the file – one in each location ✓
  - Using Save/  /Ctrl+S or Save As/Save Copy when one wants to save a file (4)  
 Save command saves the file under the same name ✓ and in the same location ✓ - it therefore overwrites the existing file and there is only one copy of the file (the latest) ✓ while Save As/Save copy command can save a file using a new/existing filename or in a different location (folder/drive) – there will be more than one copy of the file ✓ / Allows you to change the format
  - Driver and drive (6)  
 A driver is a small program ✓ that lets operating system ✓ communicate ✓ with a specific device ✓ whilst a drive refers to a physical location ✓ where files are stored ✓ such as a hard drive/USB flash drive
39. In renaming a word processing file that you have used often the last few days, the file extension accidentally changed to bocx. When you want to open the file from within the MS Word a while later, you do not see the file in the list of recent files. Explain why you do not see the file listed as part of the recently used files. (2)  
 The file is no longer associated with MS Word ✓ and therefore will not be listed as a MS Word file ✓
40. “Cracks” for games or software are provided freely on the internet. These “utilities/apps” usually comes with a very special “hidden feature”. Explain what is meant by “hidden feature”? (Tip: Trojan) (3)  
 Some apps may contain malware or adware ✓ that will install on your computer without you being aware of it ✓ that can harm your computer or collect private information ✓
41. Which factors should one consider before downloading shareware, freeware or public domain software? (4)  
 Check app reviews or verify the developer ✓ on reputable websites ✓ or download only from stores such as Google Play ✓ that require apps to pass rigorous tests ✓ before being published
42. Why should one update drivers regularly? (4)  
 New drivers offer more efficient or faster communication ✓ or allows for additional functionality ✓ or security ✓, closes possible security vulnerabilities ✓ also except legacy support



43. Study the information provided below and answer the question that follows:



If the documents folder above contains a subfolder called **School** where the file, **CAT** is stored, write down the File Path of the Homework.docx file (3)

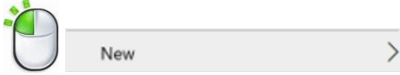
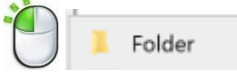


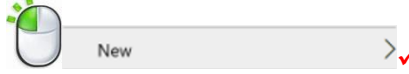
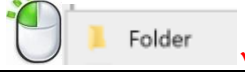
%userprofile%\Documents\CAT ✓ Aslo accept: C:\Documents\CAT ✓

44. A device provides different sign-in options. Study the options below and answer the questions that follow:

A	B	C	D	E	F

- Which of the above refers to biometric input? (2)  
A ✓ and B ✓
- D refers to signing in with a password. John uses the following password: john Explain the shortcomings with his password when comparing it to guidelines for strong passwords. (6)  
It is not a minimum of 8 characters long ✓  
It should contain uppercase ✓ and lowercase ✓ numbers ✓ and special ✓ characters  
It should not be an easy to guess password such as your name, birthday, etc. ✓
- F refers to signing in with a security key. Explain how a security key can be used to sign in (3)  
A security key is a physical device (which you can buy or create your own) ✓ such as a USB flash drive that is used in addition to a fingerprint or pin ✓ You need to plug it in for your computer to unlock your computer ✓.
- What does C refer to? (1)  
Signing in with a pin code ✓
- E refers to a picture password. How does a picture password work? (3)  
It uses a picture/image of your choice ✓ in combination with e.g. three gestures ✓ that you can do on the picture ✓ such as a combination of circles, straight lines and taps.
- Which of the above can be used as secure 2-step verification? Motivate your answer (2)  
F ✓ It is used in addition to a fingerprint or a pin ✓

45. You want to create a new folder, named Homework, in the CAT folder that is a subfolder of the Documents folder. Arrange the correct actions into the correct order. (6)

 <p>Navigate to &gt; This PC &gt; Documents</p>	<p>Navigate to &gt; This PC &gt; Documents ✓</p> <p>Navigate to &gt; This PC &gt; Documents &gt; CAT ✓</p>
	
	
<p>Enter the folder name</p>	
<p>Navigate to &gt; This PC &gt; Documents &gt; CAT</p>	<p>Enter the folder name ✓</p>

46. How does the power management utility in a laptop monitor battery usage?

Through showing which apps consume most battery power ✓, displays battery usage since last charge ✓, displays estimate usage time remaining ✓, enables power saving mode ✓

47. Compare open source software to proprietary software. (3)

Open source is free and the source code is made available which one can alter whilst proprietary software is paid for and the source code cannot be accessed

48. Why should one activate software? (2)

Get full functionality ✓, entitles you to free software updates ✓

49. What is the advantage of free open source software (FOSS) over proprietary software? (2)

One can change the source code ✓ of open source software and it is mostly free ✓

50. Why would you want to obtain the latest versions of shareware, freeware and public domain software apps through regular updates? (2)

Many developers update their software to include new features ✓ and thwart malware ✓

51. Mary decides to use a security key to log into her computer. Explain what the advantages and disadvantages of using a security key are (2)

A security key offers an additional layer of authentication ✓

If the key is lost, one cannot access the system ✓

52. Sifiso chose the option of a picture password and wants to use the following picture:



53. Suggest a combination of three different gestures (3)

Draw circle with finger around one of the faces ✓ + draw straight line bottom up on second figure's arm ✓ + tap on face of another figure ✓ (any 3 valid gestures that – gestures must differ)

54. State whether the following statements are true or false
- Utilities differ from applications mostly in terms of size, complexity, usability and their function (1)  
True✓
  - Applications can be used without an operating system (1)  
False✓
  - Any device that has an operating system allows you to change how the device works (1)  
True✓
55. What happens to a file or folder when it is deleted on a local disk? (4)  
It is allocated to the Recycle Bin✓ where it is stored temporarily✓ and from where it can be recovered✓ if necessary until it is deleted✓ from the recycle bin

### Level 3

56. For each of the following, choose the software item in the list that does not logically belong in the list and explain why it does not belong:
- WMF, AVI, MP3, MP4, MOV (2)  
MP3✓ is audio file and other are video files✓
  - DOC, DOCX, RTF, TXT, PPTX (2)  
PPTX✓ – PowerPoint file while the others are all text files✓ or  
TXT – plain text whilst other can contain formatting
  - Android, iOS, MS Office, Windows, Linux (2)  
MS Office✓ – application software while others are system software/operating systems✓
  - DOCX, XLSX, PPTX, DOC (2)  
DOC✓ – old office file format whilst other are new office file formats using XML as basis✓
  - Disk cleaner, disk defragmenter, snipping tool, application launchers (2)  
Snipping tool✓ is Windows accessory whilst others are utilities✓
  - DOC, DOCX, XLSX, GDOC, ODT (2)  
XLSX✓ – spreadsheet file whilst others are document/text-based files✓
  - Backup, disk repair, file manager, driver, uninstaller (2)  
Driver – device driver software✓ while others are utility software✓
  - Android, Linux, iOS, Bada, Symbian (2)  
Linux✓ – PC operating system while others are mobile operating systems✓
  - Paint, snipping tool, sticky notes, word pad, file manager (2)  
File manager✓ – utility while others are Windows accessories✓
  - TXT, ZIP, RTF, CSV, LOG (2)  
ZIP – file compression software✓ while other are plaintext files✓
  - macOS, Ubuntu, Windows, Unix, iOS (2)  
iOS✓ – mobile operating system while others are PC operating systems✓

57. In the beginning of the year, you created a folder, named CAT in the Documents folder and saved all your CAT-related files in this folder. Today, when you wanted to open a file stored in the CAT folder, you could not find the folder. Explain two things that could have happened and suggest how you could solve each of the two. (4)

It could have been deleted ✓ – recover from recycle bin ✓

It could be hidden ✓ - change file explorer settings to show hidden files and folders ✓

Accept any other valid answers

58. Your friend shows you the following screen capture from her system’s storage capacity (the computer has a 256 GB SSD) Study the information provided and answer the questions that follow:



a. Why is OneDrive showing? Explain your answer by referring to the purpose and use of OneDrive. (5)

You are signed into OneDrive ✓, cloud storage ✓ which comes free if you buy MS Office 365 suit ✓ and which uses some local disk space ✓ to cache files ✓

b. If additional space is required, which of the above folders could be emptied to free space? (1)

Temporary files folder ✓

c. Which folders would you recommend for backing up? Motivate your answer. (5)

Document ✓ and Mail ✓ as applications can be reinstalled ✓, OneDrive files can be accessed using another computer ✓ and temporary files are not needed ✓

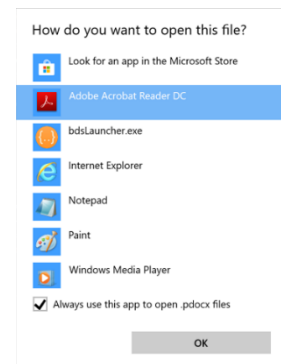
59. When you use a file compressing software to compress a .bmp file, it reduces the file size whereas if you compress a .jpg file, the size almost remains exactly like it was. Briefly explain why. (2)

.jpeg is already a compressed format ✓ so compressing software will not reduce size further ✓

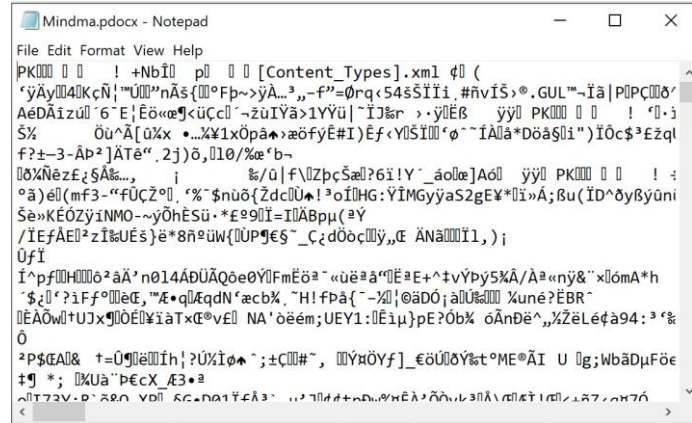
60. What is the advantage of OneDrive files showing on your local SSD? (1)

You can access these files even without Internet access ✓

61. Sifiso and Peter are working on an assignment. Peter sends the mind map he created as a SmartArt diagram created in the word processor to Sifiso for inclusion. Sifiso double-clicks the file to open it and receives the following message showing on the right:



He decides to use Notepad to open the file, but sees the following:



- a. Study the screenshots and explain what could have happened. (4)

The file extension seems to have been changed to .pdocx ✓ and Windows did not know what program to use to open the file ✓ and suggested Notepad as one application to open it with ✓. However, Notepad is a plain text file and could not read the diagram ✓

- b. Explain what Sifiso can do to recover the file (not requesting Peter so send it again) so that he could finalise the assignment. (2)
- Rename the file as Mindmap.docx ✓ open it again ✓

- 62. John replaced his ordinary, basic keyboard with a new, sophisticated gaming keyboard, but when he plugged it in, the computer requests a driver. He tells you that his old keyboard did not require a driver. Explain the situation to John.

Today's operating systems have a lot of generic drivers ✓ that allow hardware to work at a basic level without needing drivers or software ✓. However, if that device has features unknown to the operating system ✓ such as the gaming keyboard he bought, it will not work properly without drivers ✓

- 63. You are using your Android tablet to browse for apps in the Google Play store. You find an app you want to download, but you are unable to download it because a message states it is incompatible with your device. Why might the app be incompatible with your device? (3)

Some apps can only install on certain devices/models ✓, some apps can only be installed in certain countries ✓, e.g. a banking app, some apps require a minimum version of operating system (Android) ✓, e.g. Android X,X and higher

- 64. When you displayed a list of programs installed on your computer, you noticed several installed programs that you do not remember installing.
  - a. Why might these programs be on your computer? (2)

It was preinstalled when you bought your computer ✓ or it might have been installed when you downloaded free apps from websites ✓ or some plugins appear as individual programs

- b. What action could you take to get rid of these? (1)
- Uninstall the files using the Uninstaller utility ✓  
Reset to a previous point ✓ (any one)

- 65. Why do some devices only run on text-based OS (1)
- The device has no screen ✓ or it is a low resource device (low storage, RAM) ✓ (any 1)