

Q1.

Michael is a long-distance runner. He is preparing for a marathon.

A radio reporter interviews Michael after the marathon.

The interview is used for a podcast.

Michael uploads the podcast to his blog.

Some people cannot access the podcast.

State **two** causes of unequal access to ICT.

(2)

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Q2.

Layla has a new netbook

Layla would like to use VoIP on her netbook to keep in touch with her cousin in Canada.

(i) State **two** pieces of equipment she will need to make calls.

(2)

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(ii) Most of Layla's friends have computers at home.

She finds that she cannot use VoIP to call some of them.

Give **one** possible reason for this.

(1)

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*(iii) Some people have limited access to digital technology.

Discuss the impact this has on their lifestyle.

(6)

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Q3.

Lee, Mitch and Stevie are school friends. They have a wide range of interests.

They are confident users of ICT. They use ICT in learning, leisure and socialising.



(i) Mitch wants to backup video files that he records.

Why is backing up important?

(1)

- A So that files are easy to find
- B So that files can be edited
- C So that files can be restored
- D So that no one can take the files

(ii) Mitch could use DVD or CD to backup his video files.

State **one** reason why DVD is more suitable.

(1)

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(iii) Identify **one local** storage device, other than a DVD or CD drive, that could be used for backups.

(1)

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(iv) Mitch could use online storage for his video files.

Give **two** advantages of using online storage rather than DVD.

(2)

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Q4.

Laura and Shameela are friends. They use digital devices to listen to their favourite bands and to watch music videos.



Laura wants to connect her personal media player to her television.

When Laura gets home from City Arena, she buys a Blu-ray disc of the band's performance from an online store.

(i) Which feature of Blu-ray discs makes them suitable for high definition video?

(1)

- A** Speed
- B** Storage space
- C** Seek time
- D** Scratchproof

(ii) Explain why a Blu-ray disc will not play on a DVD player.

(2)

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(iii) When Laura plays the disc, she is given the option of viewing online content.

Other than her Blu-ray player and television, state **one** piece of equipment Laura will need to view this online content.

(1)

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(iv) The disc uses copy protection technology.

Explain why this is needed.

(2)

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Q5.

Michael is a long-distance runner. He is preparing for a marathon.

He uses a Bluetooth health monitor.

What is Bluetooth?

(1)

- A** A high speed wired connection
- B** A type of wireless connection
- C** An energy saving connection
- D** A high resolution connection

Q6.

Michael is a long-distance runner. He is preparing for a marathon.

He uses a Bluetooth health monitor.

Michael uses Bluetooth to transfer data from the health monitor to his tablet computer.

(i) State why he might use Bluetooth rather than infrared for this transfer.

(1)

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(ii) Give **two** factors that might affect the speed of the transfer.

(2)

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(iii) Michael encrypts the data to send it securely to the team.

Explain how encryption helps keep data secure.

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Q7.

Lee's dad has decided the family should join the digital age.

He has bought some new laptops.

He wants to choose a broadband supplier.

They have a choice of four suppliers.

Suppliers				
	FastWeb	BB Broadband	Lime Mobile	JetNetz
Download speed	20 mbps	8 mbps	6 mbps	30 mbps
Monthly usage	250 GB	Unlimited	15 GB	100 GB

(i) The supplier that offers the best bandwidth is:

(1)

- A FastWeb
- B BB Broadband
- C Lime Mobile
- D JetNetz

(ii) **BB Broadband** offers 'unlimited' monthly usage.

State what this means.

(1)

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(iii) One supplier offers mobile broadband.

State **one** benefit and **one** limitation of mobile broadband.

(2)

Benefit

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Limitation

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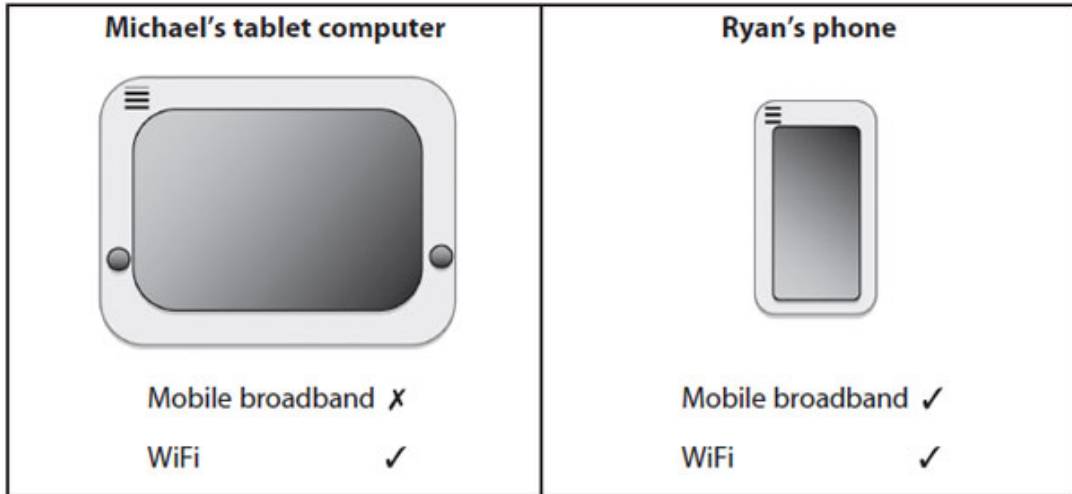
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Q8.

Michael and Ryan are athletes.
They use digital devices as they try to improve their performance and when they relax.
They are travelling to an overseas athletics event.

Ryan's phone has WiFi connectivity and access to mobile broadband.

Michael's tablet computer only has WiFi connectivity.



(i) Describe how Ryan could share his phone's mobile broadband connection with Michael's tablet computer without using cables.

(2)

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(ii) State how Ryan could prevent other devices from sharing his connection.

(1)

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(iii) Explain why sharing the connection might affect the bandwidth available to Ryan.

(2)

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Q9.

Lee, Mitch and Stevie are school friends. They have a wide range of interests.

They are confident users of ICT. They use ICT in learning, leisure and socialising.



(i) Mitch wants to record himself rock climbing.

Give **one** reason why Camcorder A is suitable.

(1)

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(ii) Most of the camcorders have an LCD screen.

State **one** use for the screen.

(1)

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(iii) Mitch needs extra removable storage for the camcorder.

State what he should buy.

(1)

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(iv) Some camcorders have WiFi.

State what is meant by WiFi.

(1)

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(v) Mitch wants to be able to record objects in the distance.

State which camcorder feature he will need.

(1)

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(vi) Camcorder D has GPS tagging as an extra feature.

State what GPS tagging does.

(1)

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(vii) State why GPS tagging is a useful feature.

(1)

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Camcorder A		Camcorder B	
			
Video format	SD	Video format	SD
Optical zoom	None	Optical zoom	None
Digital zoom	None	Digital zoom	2x
LCD screen	None	LCD screen	2" colour
Internal memory	None	Internal memory	4 GB

Removable storage	SD card	Removable storage	None
Battery life	2.5 hours	Battery life	2 hours
Extra features	Waterproof, shockproof	Extra features	None
WiFi	None	WiFi	None
Camcorder C		Camcorder D	
			
Video format	HD 720p	Video format	HD 1080p
Optical zoom	15x	Optical zoom	12x
Digital zoom	18x	Digital zoom	30x
LCD screen	3.5" colour	LCD screen	3" colour
Internal memory	32 GB	Internal memory	240 GB
Removable storage	SD card	Removable storage	SD card
Battery life	5 hours	Battery life	3 hours
Extra features	None	Extra features	GPS tagging
WiFi	Yes	WiFi	None

Q10.

Lee, Mitch and Stevie are school friends. They have a wide range of interests.

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Mitch wants to buy a camcorder.

(i) Which of these camcorders has wireless connectivity?

(1)

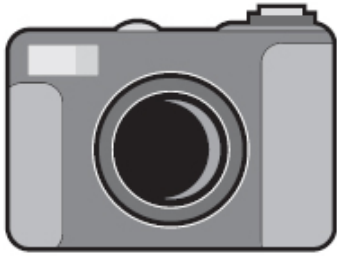
- Camcorder A
- Camcorder B
- Camcorder C
- Camcorder D

(ii) Which of these camcorders records at the highest resolution?

(1)

- Camcorder A
- Camcorder B
- Camcorder C
- Camcorder D

Camcorder A	Camcorder B



Video format	SD	Video format	SD
Optical zoom	None	Optical zoom	None
Digital zoom	None	Digital zoom	2x
LCD screen	None	LCD screen	2" colour
Internal memory	None	Internal memory	4 GB
Removable storage	SD card	Removable storage	None
Battery life	2.5 hours	Battery life	2 hours
Extra features	Waterproof, shockproof	Extra features	None
WiFi	None	WiFi	None

Camcorder C

Camcorder D



Video format	HD 720p	Video format	HD 1080p
Optical zoom	15x	Optical zoom	12x
Digital zoom	18x	Digital zoom	30x
LCD screen	3.5" colour	LCD screen	3" colour
Internal memory	32 GB	Internal memory	240 GB
Removable storage	SD card	Removable storage	SD card
Battery life	5 hours	Battery life	3 hours
Extra features	None	Extra features	GPS tagging
WiFi	Yes	WiFi	None