

# Thursday 23 May 2024 – Afternoon

# Level 3 Cambridge Technical in IT

05839/05840/05841/05842/05877 347Unit 3: Cyber security 347031 34





#### **INSTRUCTIONS**

Do not send this Insert for marking. Keep it in the centre or recycle it.

#### **INFORMATION**

- This Insert contains the pre-release material that you have already seen.
- This document has 4 pages.

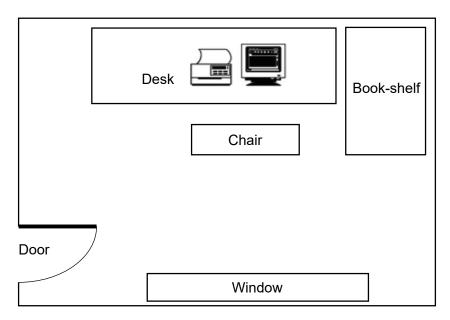
#### **Charlie's Home Network**

Charlie has recently moved house. The house is in a residential street, with houses on both sides of the road.

Charlie has decided to set up a home office and network in the house and has purchased a second-hand router from a car boot sale. The router still has the default administrator username and password so the configuration settings can be accessed.

The home office is situated on the first floor at the front of the house. The house has a small number of power sockets so Charlie has to use multiple extension leads to power electrical devices.

## **Home Office Setup**



When working, Charlie has the window to their back. The computer is often left switched on for long periods of time.

Charlie has made friends with the people who live in the house on the other side of the street. They have one teenager who is studying computing at a local college.

Being new to the area, Charlie has joined a number of local groups to get to know people in the neighbourhood.

Charlie suspects that their home network has been hacked.

### **Further research**

To prepare for the exam, you should research the following themes:

- The aims of cyber security and measures Charlie can implement to ensure the network continues to function.
- The types of cyber security incidents that Charlie is vulnerable to.
- The types and motivations of attackers that would target a home network.
- How cyber security incidents can disrupt Charlie's life.
- The impact on Charlie of the home network being hacked.
- How Charlie can conduct an audit of their network to prevent future incidents.
- The tools and techniques Charlie could use to test the security of their home network.



#### Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, OCR (Oxford Cambridge and RSA Examinations), The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of Cambridge University Press & Assessment, which is itself a department of the University of Cambridge.