

Key Stage 3 Computer Science

Year 7 Homework Booklet 2



Student name:

Class:



| Week | Task title | Summary | Pages | Date due |
|------|-------------------------------------|---|-------|----------|
| 6 | Storage Devices | Demonstrating your knowledge and understanding of different storage devices. | 2 | |
| 7 | Network Hardware | Demonstrating your knowledge and understanding of Network Hardware. | 3 | |
| 8 | Network Security | Carry out research into network security. | 4 | |
| 9 | What is Programming? / Ada Lovelace | Complete the tasks about programming and create a fact file about Ada Lovelace. | 5-6 | |

Homework should be submitted every three weeks on your Google Classroom or written out and handed in to your teacher on the date it is due. Any issues with the homework must be addressed with your teacher before the due date.

For further help and support, please email your teacher:

Mr Cook – a.cook@benjaminbritten.school

Mr Sweetman – adrian.sweetman@benjaminbritten.school

Week Six – Storage Devices

Create a poster for the following storage devices:

- Magnetic Tape
- Floppy Disk
- Hard Disk Drive
- Solid State Drive
- CDs
- DVDs
- Blu-Ray Disk
- Cloud Storage

You need to explain different characteristics that each device has. Also, state some advantages and disadvantages. Use these websites to help you:

<https://www.bbc.co.uk/bitesize/guides/z7rk7ty/revision/6>

Week Seven – Network Hardware

Create a poster about the following pieces of network hardware:

- Router
- Hub
- Switch
- Server

You may wish to explain the role of each piece of hardware within a network and include a picture of it. Here is a link to a website that will help you:

<https://www.bbc.co.uk/bitesize/guides/zh4whyc/revision/5>

Week Eight – Network Security

Use the following link to help you: <https://www.bbc.co.uk/bitesize/guides/zs87sbk/revision/1>


Complete the sentences

Computer _____ have many benefits but they also create _____ risks. By connecting _____, it is possible to share personal data easily. However, it makes computers more _____ to interference from other people.

Anyone sharing _____ information, e.g. bank details, wants to be sure that they are safe and _____. Most businesses and organisations employ network _____ or administrators to manage the _____ of their networks.

security secure managers personal vulnerable computers
networks security

Complete the table:

| Network Security | What it does | Picture |
|---------------------|--------------|---|
| Anti-Virus Software | | |
| Firewalls | | |
| Secure Password | | |
| Access Levels | |  |
| Encryption | | |

Week Nine – What is Programming?

Use the following website to help you complete this task:

<https://www.bbc.co.uk/bitesize/guides/zts8d2p/revision/1>

Complete the missing words

Programming is _____ computer code to create a _____, to solve a problem. Programs are created to implement _____. Algorithms can be represented as _____ or a flowchart, and programming is the _____ of these into a computer program.

To tell a _____ to do something, a program must be written to tell it _____ what to do and how to do it. If an algorithm has been _____, the computer program will follow this algorithm, _____, which will tell the computer exactly what it should do.

Missing Words

program algorithms computer translation exactly something
writing designed step-by-step pseudocode

State the name of three different programming languages.

Complete the table:

| Statement | Purpose |
|-----------|------------------------|
| print | |
| | Get data from the user |
| If...else | |
| while | |
| for | |
| def | |

Week Nine – Ada Lovelace Fact File

Create a one-page fact file about Ada Lovelace. You may include information such as:
Where she was born? Why she is famous? What did she invent?