Key Stage 3 Computer Science
Year 7 Homework Booklet 1

Student name: **Class:**

Week	Task title	Summary	Pages	Date due
1	Legislation	Learning about different legislation and applying your knowledge to scenarios.	2-3	
2	Copyright Research	Carrying out research into real life copyright scenarios.	4	
3	Input & Output Devices	Demonstrating your knowledge and understanding of input and output devices.	5-6	
4	What is inside of a computer?	Carry out research into the cost and specification of different computer components.	7	
5	CPU & Memory	Demonstrating your knowledge and understanding of CPU and memory.	8-9	

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:

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Week One – Legislation

1. **Use the word bank to complete the sentences. – Legislation**

The _____ is the law that defines and _____ a number of offenses involving the use of a _____. For example, unauthorised access to computer systems.

The _____, Designs and Patents Act 1988 gives the _____ of published materials _____ over the way it is used.

The _____ is a legislation passed by parliament that governs the protection of _____ _____ in the UK.

Word Bank

Data protection act   computer   Copyright   Computer Misuse Act
criminalises   data   creator   Personal   control

2. **In each scenario below, suggest which law(s) have been broken and who by?**

Scenario	Law(s) broken	Who is (or could be) at fault?
A dentist has given out appointment time and details for a patient to a friend who has called.		
An employee has copied mobile phone details of some celebrities from the company computer system.		
A student has illegally downloaded an album from a record artist.		

A receptionist has accessed a doctor's emails without permission.		
A hacker has tried to gain access to a school computer system to view and modify their exam grades.		

3. Use the space below to create a mind map that represents what material can be protected by copyright.

Week Two – Copyright Research

There have been many famous cases over the years of copyright law being broken by big businesses. Carry out research into one of the following cases:

Dyson Vs Hoover

Apple Vs Google

You can present your findings in the form of an information poster.

Week Three – Inputs and Outputs

Name the following input and output devices and state what they do.

Device	Name	What it does

2. Which of the above pictures are used to put information **into** a computer?

3. Which of the above pictures are used to get information **out** of a computer?

4. Devices which put information into a computer are called input devices. Devices which get information out of a computer are called output devices.

Separate the list below into input and output devices.

Scanner   Speaker   Microphone   Touch Screen   Webcam

                        Digital camera   Projector

Input Devices	Output Devices

Week Four – What is inside of a computer?

Use the internet to help you complete the table.

Computer Component (Picture)	What is its purpose?	Specification (Copy and paste from the internet)	Cost
Graphics Card	To display graphics on the screen. The more powerful the graphics card is the better the graphics will be.	8 GB GDDR6 - CUDA cores: 4864 - Clock speed: 1410 / 1665 MHz - HDMI / DisplayPort - VR Ready	£700.00 (PC World)
Motherboard			
Solid State Drive			
CPU			
RAM			
Computer Case			

Create a poster that explains the purpose of the computer components mentioned in the table above. E.g. A graphics card is used to display graphics on the screen. You could then include a picture of one.

Week Five – CPU & Memory

Use the following link to help you:
https://www.bbc.co.uk/bitesize/guides/zmb9mp3/revision/1

1. Complete the sentences using the missing words.

Computers require input hardware, processing hardware and _____ hardware. The _____ that defines a computer is the _____ and memory. Without these a computer could not _____.

The CPU - _____ programs using the fetch-decode-execute cycle.

Memory - stores program operations and _____ while a program is being executed. There are several types of memory, including: _____, cache, _____ and virtual memory.

Storage - stores programs and files _____, even when they are not in use. Devices such as _____, USB memory sticks or SD cards are used to store files such as photos, music and software applications long term.

Missing words

hardware   **function**   **hard drives**   **output**

executes   **CPU**   **registers**   **data**

RAM   **long term**

2. What is bench marking?

3. State four key factors about CPU architecture that affects its performance.

4. What is a core?

5. What does a core contain?

6. What is clock speed?

7. What is clock speed measured in?

8. What is the cache?

9. What is the control unit?

10. What are the two main types of CPU?