

## **Jigsaw Group Worksheet – Chapter 2: Computer Hardware**

Name: Arulmurugan a/l Subramaniyam

Class/Group: Group 3

### **Instructions:**

As you meet with each expert from the subtopics, listen carefully and complete the table below. You should finish with a summary of all 6 subtopics.

### **Summary Table**

<b>Subtopic</b>	<b>Key Points (Write 2–3 key facts)</b>	<b>Expert's Name</b>
1. Introduction to Computer Systems & Hardware	<ol style="list-style-type: none"><li>1. A computer system consists of hardware and software components that function together to complete a specific task.</li><li>2. Hardware components are the physical parts of a computer, which are categorized into four main types, including :<ol style="list-style-type: none"><li>i. Input devices</li><li>ii. Output devices,</li><li>iii. Secondary storage devices</li><li>iv. Internal components</li></ol></li><li>3. Hardware is essential for executing software, enabling data storage and I/O operations, ensuring system performance, and supporting connectivity.</li></ol>	Fatin Syahirah Binti Nor Rashid (SX241920ECRHF01)
2. Input and Output Devices	<ol style="list-style-type: none"><li>1. Input devices allow users to provide data and commands to the computer for processing, such as keyboards, mouse, and scanners.</li><li>2. Output devices display or produce results from the computer's processing, such as monitors, printers and speakers.</li><li>3. Input devices transform physical actions into digital signals that the computer can process, while output devices convert the processed data into a form that the user can perceive.</li></ol>	Izwan Aziz Bin Ismail (SX241894ECJHF01)

3. System Unit and Its Components	<ol style="list-style-type: none"> <li>1. The system unit houses the essential components of the computer, such as the motherboard, CPU (processor), RAM, power supply (PSU), storage devices and expansion cards.</li> <li>2. The central processing unit (CPU) executes instructions and performs calculations. It consists of the control unit (CU), arithmetic logic unit (ALU), and registers.</li> <li>3. All components in the system unit are essential as they work together to ensure the computer operates efficiently, processes data, and stores information for both immediate use and future access.</li> </ol>	Arulmurugan.S (SX210291ECJHS01)
4. Storage Devices	<ol style="list-style-type: none"> <li>1. In computing, storage is the process of saving and retaining digital data, enabling files and programs to be accessed later, and without it, computers would lack the ability to preserve data beyond immediate operations.</li> <li>2. Primary storage refers to temporary, fast-access memory like RAM, while secondary storage provides long-term data storage, such as hard drives and SSDs.</li> <li>3. The current trend in storage is the increasing reliance on cloud storage, offering scalable, accessible, and flexible solutions for data storage and backup across multiple devices and platforms.</li> </ol>	Leavinish a/l Balasubramaniam (SX240278ECRHS01)
5. Ports and Connectors	<ol style="list-style-type: none"> <li>1. Difference between Ports and Connector -<b>Ports</b> are socket for connecting external device to the system units while <b>Connectors</b> are the plug or ends of the cable that go into the ports.</li> <li>2. Main functions of ports and connectors are to enable communication between devices by</li> </ol>	Aaron a/l Ravindran (SX210292ECJHS01)

	<p>facilitating data transfer, charging, audio/video output and internet connectivity.</p> <p>3. There are many types of ports and connectors such as:</p> <ul style="list-style-type: none"> <li>i. USB – Widely used for connecting devices such as keyboards, mouse, printers or external storage.</li> <li>ii. HDMI – Send High Quality audio/video.</li> <li>iii. VGA – Transmit analog video to monitor or projectors.</li> <li>iv. Connectors – USB connectors, RJ45 connectors for Ethernet.</li> </ul>	
6. Care and Maintenance of Computer Hardware	<p>1. Proper maintenance improves performance, extends lifespan, and reduces the risk of breakdowns of computer system.</p> <p>2. Care and maintenance of a computer includes both hardware and software, ensuring that physical components are protected and cleaned, while software is kept up to date, optimized, and free from errors or viruses to maintain overall system performance.</p> <p>3. There are safety procedures to follow when cleaning a computer system, such as powering off the device, using anti-static precautions, and handling components with care to avoid damage.</p>	Nur Farrah Ha Binti M.Waled (SX241905ECJHF01)

Reflection (Answer in 1–2 sentences)

1. Which subtopic did you find most interesting, and why?

The subtopic that I found most interesting was ports and connectors. I was fascinated by the wide variety of ports, from older types that are no longer in use to the latest generation ports. Presentation and discussion about this topic really helped me understand how technology has evolved, and how each port serves a specific purpose in connecting devices to the computer.

2. What is one thing you learned today that surprised you?

One thing I learned today that surprised me was how important regular care and maintenance are for both the hardware and software of a computer. I didn't realize how simple actions like cleaning dust from components and updating software could significantly improve performance and extend the computer's lifespan.