“I seek to decide the best combinations of data plans, procedures and the physical resources required to generate an efficient and effective home network so can do my school work at home.”

**Definition Digital Systems**

The term digital system refers to elements such as hardware, software and networks and their use. There may be many different components that make up one system; for example, a computer has a central processing unit, a hard disk, keyboard, mouse, screen etc. A peripheral device is a digital component that can be connected to a digital system, for example, a digital camera or printer.

1. Digital hardware and software components (internal and external) used to transform data into a digital solution. When digital systems are connected, they form a network.

2. A smartphone is an example of a digital system that has software (apps, an operating system), input components (for example, touch screen, keyboard, camera and microphone), output components (for example, screen and speakers), memory components (for example, silicon chips, solid state drives), communication components (for example, SIM card, wi-fi, bluetooth or mobile network antennas), and a processor made up of one or more silicon chips.
• Find a variety of graphics that represent the following computer peripherals:
• Include a short comment to the purpose the peripheral plays in a computer system
• Include videos and websites that support your answers
  • iPad
  • Desktop Computer
  • Laptop
  • Apple TV
  • Printer
  • Software
  • Keyboard
  • Mouse
  • Speakers
  • Joystick
  • Flash Drive
  • Scanner
  • Microphone
  • Webcam
  • Monitor
**PART B – HARDWARE COMPONENTS**

Here are some common individual computer hardware components that you'll often find inside a modern computer. These parts are almost always found inside the computer’s housing:

- Motherboard
- Central Processing Unit (CPU)
- Random Access Memory (RAM)
- Power Supply
- Video Card
- Hard Drive (HDD)
- Solid-State Drive (SSD)
- Optical Drive

**PART C – SOFTWARE**

Computer software, or simply software, is a part of a computer system that consists of data or computer instructions, in contrast to the physical hardware from which the system is built. In computer science and software engineering, computer software is all information processed by computer systems, programs and data.

Choose Ten Apps that are currently on your iPad.

- Capture a graphic to represent the App
- Include the App Store Link
- Include a short comment to what that app allows you to do on your iPad
PART D – COMPUTER NETWORK

A computer network is a set of computers connected together for the purpose of sharing resources. The most common resource shared today is connection to the Internet. Other shared resources can include a printer or a file server. The Internet itself can be considered a computer network.

Identify each component of a computer network listed below

- Include a graphic
- Include a short comment to role of the component in a computer network
- Include videos and websites that support your answers

- Modem
- Router
- Switch
- Hub
- Network Interface Card
- Ethernet Cable
- Wireless Access Point
- Fibre Optic Cable
- Wi-Fi network
- Cat 5 Cable
PART D – NETWORK TOPOLOGIES

Network Topology refers to layout of a network. How different nodes in a network are connected to each other and how they communicate is determined by the network’s topology.

Identify the common types of network topologies

- Include graphic/s
- Include a short comment explaining the network topology
- Include videos and websites that support your answers