1. **In 600 words, describe a piece of technology. Consider the following and answer it in an essay form:**

This essay will describe this piece of technology called router. A router is a small device that sites between your modem and computer. Most routers are about the same size and shape as a modem. A router can be either wired or wireless. The difference is that you are connecting devices to it either over WiFi or through an Ethernet cable. WiFi offers greater firmness of movement around your home while wired can offer great speeds.

It is a specialized networking device that forwards data packets between computer networks and is connected to two or more networks running software that allows the router to move data from one network to another and keep certain kinds of transmission movement under control. A router also decides which packet should be processed first when multiple queues exist. It is in fact absolutely essential because it makes sure that the right data from the internet gets passed to the right device. It knows the best routes to send your data on and it is the connection between millions of networks on the internet. A router’s work is similar to the sorting, collecting and delivering of a letter. For example, if you want to send a letter to another country, it will go from your mailbox to a local sorting office, state, national, international and then back to a local office in the other country. At each stage someone is making a decision about the best way to get from where to where. Without a router, you would not be able to have more than one device using your internet connection.

Anyone can use router, but first thing you need to do is to purchase a wireless network. When you have your router with you, you need to connect the router’s WAN pot to your internet source such as cable modem using the first network cable. Because most routers have four LAN ports, connect one of the router’s LAN ports to the computer using the second network cable and plug the router into the power outlet using its power adapter. Make sure you do turn on the switch of the router if there is a switch but most routers don’t have any switch.

Router is measured in gigahertz (GHz). It can use either the 2.4 or 5 GHz frequency bands to broadcast WiFi signals. When using 5 GHz, it allows people to use routers in areas where there is a lot of wireless interference. If using the 2.4 GHz router, your internet speed would slow down at certain times especially when all the other wireless devices in your house are connected. If any reason you need another band to work with, a 5 GHz router would be capable of delivering internet to your wireless device without any interference.

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| The development of router technology and its massive expansion of its use to be allowed to access easily and it is suitable to access when using the internet throughout the years. The networks may be well-known by business, in the public for people to use freely, or set up for household uses.  Wireless conferences and boardroom meetings across airwaves have saved officials much trouble in traveling on airplanes or driving.  Without a router, we would not be able to talk to any long distance friends, or family. Router and its WiFi helps us with our daily life, and our daily tasks (our jobs). Our society has its control over things easily, and helps people get answers online quickly. |