Section 3 Study Companion

**Lesson 3:1 – The History of the Computer**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1st Generation | 2nd Generation | 3rd Generation | 4th Generation |
| Hardware |  |  |  |  |
| Programming Language |  |  |  |  |
| Purpose: Who used them? |  |  |  |  |

**Lesson 3:2 – Introduction to Computer Hardware**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Input Devices | Output Devices | Storage |
| 3 Examples of Each |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | CPU | RAM | Hard Drive | Graphics Processor Unit | Expansion Card |
| What is it responsible for? |  |  |  |  |  |

**Lesson 3:3 – Components of Computer Hardware**

**CPU**

* What does CPU stand for?
* What is the CPU responsible for?
* How is the speed measured?
* What are the 3 parts of the CPU?
* What does IPOS stand for?

|  |  |  |  |
| --- | --- | --- | --- |
|  | Arithmetic Logic Unit | Control Unit | Process Register |
| Definition |  |  |  |

**Buses**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Buses | Address Bus | Data Bus | Control Bus |
| Definition |  |  |  |  |

**The System Unit**

* **Motherboard**
  + What are 3 examples of motherboard components?
  + What is the purpose of the system clock?
* **Secondary Storage**
  + What is secondary storage?
  + What are examples of secondary storage?
  + What are expansion slots for?
  + What are ports for?
* **What are peripheral devices?**

**Communication Devices**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Modem | Network Cables | Satellite | Wireless | Bluetooth |
| Definition |  |  |  |  |  |

**Types of Computers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Supercomputer | Mainframe Computers | Workstation | Microcomputer |
| Designed for who to use? |  |  |  |  |
| Why was it built? |  |  |  |  |
| Purpose |  |  |  |  |
| Examples |  |  |  |  |

Types of Computers

|  |  |  |  |
| --- | --- | --- | --- |
|  | Laptop | Desktop | Handheld/Mobile |
| Performance |  |  |  |

**Communication Devices**

What is the purpose of communication devices?

What are some typical communication alternatives?