The Journey Inside Notes

**INTRODUCTION TO COMPUTERS**

**Directions:** Using Intel’s “The Journey Inside” website (<http://educate.intel.com/en/TheJourneyInside/ExploreTheCurriculum/EC_IntroductionToComputers.aspx>) take the following notes.

**Lesson 1: History of Computers**

* The earliest calculating machine was the \_\_\_\_\_\_\_\_\_\_\_\_, which is about \_\_\_\_\_\_\_ years old.
* In the 1600’s, \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ were invented. (They could add and multiply but not \_\_\_\_\_\_\_\_\_\_\_!)
* In the early 1800’s, Charles \_\_\_\_\_\_\_\_\_\_\_ designed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ machines, that are the true ancestor to today’s computers.
  + Ada Byron King (Countess of Lovelace) was his \_\_\_\_\_\_\_\_\_\_\_\_\_ and is considered the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The problem with the early mechanical machines was that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

* Electronic components made modern computers possible because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Lesson 2: Four Components of a Computer**

* The four components of computer processing are: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The physical parts of a computer that you can touch, such as a keyboard, mouse, and monitor, are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the programs and data that make a computer hardware function, allows the computer to figure out what to do with the \_\_\_\_\_\_\_\_\_\_\_\_\_ you give it.
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is known as the “brains” of the computer, is what reads and carries out different tasks according to the \_\_\_\_\_\_\_\_\_\_\_\_\_ that instructs it.

**Lesson 3: How Computers Get Input**

* A computer is an\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ machine. (It can capture, store, update, and retrieve data and information)
* \_\_\_\_\_\_\_\_\_\_devices put information into your computer.
  + An example of an input device is a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Lesson 4: How Computers Store Information**

* For a computer to process information, it has to be able to \_\_\_\_\_\_\_\_\_\_\_ information.
* The two basic types of storage are temporary story and long-term storage.
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_storage, like Random Access Memory (RAM), is for storing data and programs which are being actively processed.
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**storage, like Read Only Memory (RAM), is for permanent information the computer uses over an over again, such as the instructions the computer prepares itself with every time you turn it on.
* An example of another storage device a computer may use to store information that isn’t actively being processed is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Lesson 5: How Computers Process Information**

* Computers use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to process information.
  + The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the most complex chip.
* An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a simpler kind of chip. (It has specific instructions that make it do one thing)
* Microprocessors are more versatile that embedded processors because they are designed to do \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Lesson 6: How Computers Deliver Information**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the computer generated information that is displayed to the user in some visible form.
  + An example of an output device is the computer’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Lesson 7: Which is Smarter?**

* A computer is fast and has a great memory, but it cannot \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.