**Lab 2 - Let’s Take Apart Computers!**

Lab Objectives:

1. Learn about the different (main) parts of computers
2. Be able to explain what the purpose of each part is
3. Understand which components are related to input and which components are related to output (and how)
4. Be able to visually identify each component

Your Task:

Below are the components you should find in each computer. Using the table as a guide,

1. identify each component as you find it in the computer (write a brief description of what it looks like),
2. describe what that component’s function is (including **why** this function is necessary), and
3. determine whether the component is related to **input** or **output**, and whether it is related to **processing** or **storage**.

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| --- | --- | --- | --- |
| Component | Desktop | Laptop | Describe the function and importance? |
| Fan | Usually a little box fan inside the casing | Fan within laptop, usually on the bottom | Keeping heat flowing out of the computer so that components don’t overheat and hamper functionality. |
| Power Source | Cables from outlet to case to provide energy to computer | Rechargable battery within casing | Gives computer energy to run |
| RAM (Random Access Memory) | Chips that plug into the motherboard | Modules soldered directly onto the motherboard | The short term memory of a computer. Can be read or edited in any order. Data is lost when powered off |
| Storage  (Hard Drive Disk or Solid State Drive) | Big module which plugs into motherboard | Solid module built into the laptop itself. | Long term memory of a computer. Can be read or edited in any order. Data is not lost when powered off. |
| Other Drive(s) | Disk drives, |  |  |
| Motherboard | Largest, central PCB in a desktop; modules found plugged in | Largest, central PCB in a laptop; modules soldered directly onto it. | Main PCB in a computer; facilitates communication between various components. |
| Video Card | PCB module | Integrated circuit module soldered onto motherboard | Circuit that facilitates output being displayed on a screen. |
| CPU (Processor) | Chip found snapped into motheboard | Chip soldered directly to motherboard | Electronic circuitry that executes instructions given to the computer. Does arithmetic, logic, controlling and I/O as specified by programs. |
| Other Parts? | GPU |  | Specialized chip for image/video/animation calculations and rendering. |