Activity Sheet: Build Your Own Desktop PC – Part 2

**Activity #1**

*Identifying components*

Identify the following computer parts on your pc. Refer to the diagram on your handout for help. When complete, ask the trainer to review your progress.

1. **RAM (Random Access Memory**): These rectangular memory sticks are found in parallel of each other on the motherboard.
2. **Motherboard**: The large main board that connects all of the computer components.
3. **CPU cooler**: Large aluminum and/or copper fins that are placed on top of the CPU or APU to disperse heat. The largest cooler on the motherboard.
4. **CPU/APU (Central Processing Unit)**: This is the main processor on your motherboard. (Hint: check under the CPU/APU cooler)
5. **GPU (Graphics processing Unit)**: If you do not have an APU this will be a card plugged into one of the PCI slots of your motherboard.
6. **PCI expansion cards**: These are usually rectangular components plugged into PCI slots. These can include graphics cards, sound card, wireless card and much more.
7. **CD/DVD/Blu-ray Drive**: Typically found on the front of your computer case with a SATA cable connecting it to the motherboard.
8. **Hard Drive**: Large rectangular device, often hidden on your case, that connects to your motherboard with a SATA cable.
9. **Cooling Fans**: Located throughout the computer case, fans bring in cool air and push out hot air.
10. **PSU (Power Supply)**: Large square/rectangular device with many power cords coming out of it to power your components.

**Activity #2 -** *Disassembly*

**\*Note**: Computer components do not require force for removal. If something is not moving, alert the instructor for instructions to avoid damaging parts.

1. Refer to the diagram on your handout to determine how to open your computer case. You will need to swing the case open or remove the case door.
2. As a precaution, touch your hand to the metal in order avoid electric shock damage to the parts.
3. Disconnect and remove (if applicable) all visible cords connecting computer components.
4. Have pen and paper ready. Carefully remove all computer components that are not secured by a screw and label them. Note: Remember to ground yourself by touching metal before you handle any computer component.
5. On your paper, draw a circle large enough to hold the screws for each component. Make sure to label which component the screws belong to.
6. Remove the component carefully after all of the screws have been removed. Repeat this process for all remaining components.
7. When finished, alert the instructor to verify all components have been removed and for instructions on reassembly.

**Activity #3 -** *Reassembly*

1. As a precaution, touch your hand to the metal in order avoid electric shock damage to the parts. If you remember the order in which you removed the components, follow that order for reassembly; otherwise, follow the steps below.
2. Attach the CPU/APU and its cooler back onto the motherboard. Ground yourself.
3. Securely screw the motherboard to the case.
4. Attach the power supply, fans, and other components that are secured by screws.
5. Install any PCI cards such as GPUs, wireless cards, sound cards, etc.
6. Install the RAM.
7. Install the hard drive, optical drive and/or any other components leftover.
8. Reconnect the power supply cords to all components
9. Reconnect all SATA to your motherboard, hard drive, and optical drives.
10. Double check all of your connections for secure connections and that there are no extra screws.
11. After completion get the instructors to see if the computer has been properly assembled.