Throughout the next several weeks, we will be covering individual parts that are required in a personal computer (PC). As we go through each chapter, you will conduct Internet research to build a PC that will fit your needs that you define. During the course, you will put your research into a PowerPoint presentation and present your PC build to the class.

Keep and use this worksheet to document your project as we go through the course. This will make your PowerPoint file and presentation much easier!

**Step 1: Determine PC’s Use:**

Describe what this PC will be used for – be realistic! If you like gaming, design a PC for gaming. If you like photo editing or music, then use that. Build a PC that you would actually like to have and use.

**Step 2: Determine Your Budget:**

Again, be realistic! What is a reasonable amount of money that you would realistically spend on this PC?

**Step 3: Select a Motherboard:**

Use the Internet to select a motherboard that will work for your desired PC. Use websites such as newegg.com, tigerdirect.com, www.pcpartpicker.com and amazon.com to find your motherboard. Document your selection below – be sure to include price, source, & relevant motherboard details. You need to be able to explain WHY you selected this particular motherboard.

**Step 4: Select a PC Case**

The form factor of the case that you select must match the form factor of the motherboard. If you want any special features on the case (i.e. neon lights), explain why that is important to you. Include the price, source, and any relevant details about the case.

**Step 5: Select a Processor**

Use the Internet to select a processor that will work for your desired PC. Keep in mind that your processor MUST be supported by the motherboard that you selected. Document your selection below – be sure to include price, source, & relevant processor details. You need to be able to explain WHY you selected this particular processor.

**Step 6: Select Memory (RAM)**

Determine and select the type of memory (RAM) that you will need for your system. Identify the capacity and type of RAM that will fit the needs of your system. Document your selection below – be sure to include price, source, & relevant details.

**Step 7: Select Cooling**

Determine and select the type of cooling system that you will need for your system. Explain why the level of cooling that you select will be sufficient for the processing that will be accomplished on your PC. Document your selection below – be sure to include price, source, & relevant details.

**Step 8: Select Power Supply Unit (PSU)**

Determine and select the type of PSU that you will need for your system. Be sure to calculate the correct wattage needed based on your other components. You need to be sure to get a PSU that will support all the components of your PC. Consider whether you will purchase a modular or standard PSU and be able to discuss why you chose the one that you did. Document your selection below – be sure to include price, source, & relevant details.

**Step 9: Select Hard Drive(s)**

Determine and select the number and types of hard drives that you will need for your system. Determine and be able to explain the needed capacity. Discuss how the storage will be used (i.e. RAID, photo storage, etc.). Document your selection below – be sure to include price, source, & relevant details.

**Step 10: Video**

Determine whether you will use the onboard video capability of the motherboard or and external video card. Discuss how you made this choice based on your PC needs. If you are adding an external video card, document your selection below – be sure to include price, source, & relevant details.

**Step 11: Monitor(s)**

Determine and select the number and types of monitors that you will use with your system. Discuss the reasoning behind your choice. Document your selection below – be sure to include price, source, & relevant details.

**Step 12: Expansion Card(s)**

Determine if there are any additional expansion cards that you would need for your PC (i.e. TV tuner card, MIDI card, special sound card, etc.). If you are adding expansion cards, document your selection below – be sure to include price, source, & relevant details.

**Step 13: Additional Features**

Add in anything additional that you may want on your PC. This may be an operating system, specific software, etc.

**Step 14: Evaluate Choices**

Evaluate the choices that you have made for your PC components. Describe how these components will meet your needs. Determine if there is a component that you may need to remove, replace or even add/ purchase.

**Step 15: Meet the Budget?**

Did your PC fall within your stated budget? Did you estimate too high or too low? If too low, what changes can you make to make your PC work within your budget?