

Lab 02: Computer Components

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Background

In this activity, you will design a desktop computer to replace your current. You use your current computer as a model to choose components to build a computer using **PC Part Picker**. If you have a Mac, then you will have to do some additional research to figure out what the equivalent PC components would be.

This activity is not about the costs of building versus buying. The activity is about identifying what various components of your computer contribute to its ability to suit a need. Maybe you've found limitations with your computer that you would like to fix. Or you might have been so thoughtful about your choice of laptop that you want to build something as similar as possible.

Activity Instructions

Follow the steps below and answer the Questions for Reporting Back.

Steps

1. Identify the specifications of your current computer.
2. Discuss why you chose that specific configuration of computer.
3. Discuss what you would change about your current computer and why.
4. Build a machine using **PC Part Picker** that would be a suitable replacement for your current computer and addresses the changes that you identified in Step 3. (Don't forget the operating system and the peripherals like a keyboard, mouse, and monitor):
<https://pcpartpicker.com/> You will have difficulty identifying your motherboard, so choose a motherboard that supports the CPU. PC Part Picker will guide you through the selections so if you choose the CPU first, then it will only show you compatible motherboards.

Note: Question 3 asks you for the URL. The URL can be found as demonstrated in the figure below.

Questions For Reporting Back

Fill in these questions with the responses that you came up with as a team or that we discussed as a class. Responses in **Sections 0101, 0102, & 0103** should provide a comparison with the responses from the other members in the team.

1. **What are the main components of your current computer (CPU, amount of RAM, SSD or HDD size, discrete GPU or integrated GPU)?**

4th Gen Intel® Core i5 Processor

Intel HD Graphics 4400

8 GB RAM

Integrated (Dual-channel LPDDR3).

128 GB SSD

2. **Why did you purchase a computer with those components? What do you use your computer for?**

It was on sale. Touchscreen is convenient. It also comes with a stylus pen to assist with drawings and notes. This computer was sufficient for my needs of a college student.

3. **What would you change with your computer and why?**

Bluetooth isn't very good, it always disconnects so it makes it difficult to use external devices. The battery life is only about an hour or two. It would be better if the battery lasted 3-5 hours.

4. **URL for the PC Part Picker computer:**

<https://pcpartpicker.com/list/2ThrtN>

5. **Explain how the components you selected would be an improvement over your current computer**

This computer would be a big improvement then our last computer because we now have 32GB of storage compared to 8GB. This would allow our new computer to execute tasks faster. Also

CPU: Faster performance

Cooler: Better heat management

Motherboard: Motherboard that is compatible with all parts

Memory: For schoolwork and design and to open a lot of tabs

Storage: A TB SSD for fast load times and more storage

GPU: For schoolwork/videos and gaming on the side