Topic of Interest: To focus on computer components, such as the Central Processing Units, Graphics Processing Unit, and Power Supply Unit. The Central Processing Unit, or CPU for short, is the brains of the computer and serves to process instructions, from having instructions on how to process and decode data. After decoding the data, it will complete the instructions provided and transfer the data back to the user. The CPUs of today are very small in size, made of silicon, consist of cores, pins, and weigh about 60 grams. The Graphics Processing Unit, or GPU, varies in size and their function is to provide images via rendering. Modern day GPUs are made of silicon and palladium, and do not have a definite size or weight to them. (Note: Considering on removing this part and just sticking with just CPUs and PSUs, this due to GPUs following a similar process on how they generate heat and would just add unnecessary stuff)

The Power Supply Unit, or PSU, serves to provide the power needed to the other components for them to work. PSUs vary greatly based on the manufacturers but would normally contain aluminum, and a heatsink. The intention here is to explain as to why these components heat up to high temperatures, relating to transistors, semiconductors, heat dissipation, and electricity. (Note: I am considering removing the part of semiconductors. While they serve as an important tool seeing as they are used to build transistors, removing them may not be bad.)

The heat Generated from the CPUs is a byproduct of using electricity to power it. As the CPUs receive power from the PSU. The electrical current that runs through the transistors being used generate heat because of the electricity resisting the flow. If there was nothing for the current to resist there would be no heat generated. However, in our case with the CPU, the electrical current running through must pass many transistors to power the cores that are needed to provide processing power. The more processing power needed; the more electrical power needs to be provided. As such depending on the actions being performed by the computer. It may vary the temperature of the CPU. Nowadays CPUs have a lot of microscopic transistors and computing cores. As such more power is needed to work these cores, leading to an overall higher heat average.

The targeted audience for this technical description will be towards those who are in high school interested in information technology, want to begin a hobby about, or for those curious as to why computers function. We will not be delving into concepts such as how to build a computer or the market behind certain companies' manufacturing. We will also be employing a more simple way of describing the process without going in too much depth with terms or descriptions. (Note: while I do my disclaimer to be present, I am debating as to where it should be placed.)

Notes:

Semiconductors: Chapters 1; 1-14. Chapter 1; 16-21. Chapter 2: 39-51

1.) Eg is an equation for the semiconductor.
    a.) To summarize the first chapter, it mainly consists of what are the building blocks of a semiconductor and how they function.
2.) Chapter 2 goes in depth on what causes the semiconductors to produce heat. The reason being that Positively charged electrons will constantly be moving around and colliding causing heat to be produced. While this occurs, negatively charged electrodes will move towards positively charged ones. At the same time, positively charged holes will drift to negative ones. “The directed motion of the free carrieres under the action of the electrical field is an electric current.”
    a.) To further note, it follows the principle of decreasing its state of randomness and reaching a state of equilibrium. As all these charged particles bounce around the place and collide with one another in an attempt to settle down, heat occurs.

Transistors: Chapter 7; 169-185. Chapter 8; 199- 202

1.)
2.)
3.)

Final revisions.

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