

## AP COMPUTER SCIENCE PRINCIPLES - FLHS SUMMER ASSIGNMENT 2024-2025

Welcome to AP Computer Science Principles!

AP Computer Science Principles will introduce you to the foundational concepts of the computer science field and challenge you to explore how computing and technology can impact the world. Computing and computing technologies have created what is sometimes referred to as a “digital explosion”. With the growing development of computing technologies, more and more digital data is being produced at a pace so rapid that it almost seems to be feeding off itself. Throughout the class, we will be discussing the “digital explosion” concept and the impact technology has on our lives.

The first part of the summer assignment is to read Chapters 1 and 2 from **Blown to Bits: Your Life, Liberty, and Happiness After the Digital Explosion**. The entire book can be accessed through this URL: [link](https://www.bitsbook.com/wp-content/uploads/2021/08/9780137441075-Blown-to-Bits-2e.pdf).

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After reading the chapters, respond to the following questions:

1. The authors introduce seven Koans (truths) about digital information technology. Describe what each Koan means **AND** give a specific example of how each concept relates to you personally.
2. The digital explosion is “neither good nor bad” but has both positive and negative implications. Give two positive and two negative implications.
3. “Advances in computing have generated and increased creativity in other fields.” Comment on this statement. Do you agree? Provide an example to support or contradict it
4. Explain the difference between what the authors call “digital footprints” and “digital fingerprints” and provide two examples of each. Your examples could come from the reading or from your own experience.
5. Is the Privacy Act effective? Explain.
6. “Information that was previously available only to professionals with specialized access or a legion of local workers is now available to everyone.” Name three positive and three negative impacts to society based on this quote.
7. The author states that there is one main difference between us and the world in George Orwell’s book, 1984. The difference is that “we have fallen in love with this always-on world”. Explain what you think this means. You can use examples in your explanation.

The second part of the assignment is to identify a computing innovation and identify the impact the technology has on our lives and the world around us.

Read the following description of computing innovation provided below.

*Computing innovation refers to the generation and implementation of new concepts, technologies, and methodologies within the realm of computing. It is the process of introducing new ideas, technologies, or approaches within the realm of computing to bring about positive change. It involves the continuous exploration and implementation of advancements in computer science, software engineering, and related fields. This innovation aims to redefine the way we solve problems, optimize processes, and create value through the use of computing technologies.*

Consider how computing innovations have affected your life.

1. Identify a computing innovation that has had the most significant impact on your life.
2. In what ways does the innovation have a positive impact on your life or the world around you?
3. In what ways has the innovation had unintended negative consequences?
4. Can you identify any bias that exists in the innovation?
5. How would you or the world around you be different if the innovation did not exist?

Your responses to both parts of the assignment should be typed and in complete sentences. This assignment will be due **on the first day of class. Late submissions will not be accepted.** You will be submitting the Google document to Google Classroom and Turnitin - I will provide the access information on the first day of class. **You will have an assessment on the summer reading on the second day of class.**

Note that throughout the year, you will be given quizzes on the content from this book. If you have any questions, please contact me via email ([dmcguigan@fairfieldschools.org](mailto:dmcguigan@fairfieldschools.org)).

Enjoy the summer! I will see you in the fall!

Mrs. McGuigan