AP CSP – Summer Assignment Notes

Section 1 – What is Computing?

History of Computers

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•	What is a computer (your first thoughts – pause the video and answer this question before moving on)?
•	After watching more of the video, what is a computer? Were you close?
•	List out the timeline of computers presented in the video.
•	What is Moore's Law?
•	What is a program?
•	Evidence Collection – to be completed within CodeHS platform, but feel free to take notes below:

Computer Organization

• What are the 2 main parts of a computer, and what do they do? What is an output device, and what are some examples? What is an input device, and what are some examples? What are storage devices, what are the two categories and list examples? What are network devices? • What is a router? Software • What is software? What are the two types of software? Which type of software interacts directly with the hardware? What are some examples of system software? What is a GUI? What are common OS's? • What is a programming language?

Hardware

What is hardware? What is binary? What is a bit? How many bits in a byte? What are the 3 main hardware components of a computer? What is RAM? Does it persist after we turn off a computer? What is the motherboard, and what does it do? What is the CPU, and what does it do? **Future of Computing** Today's traditional computers use which type of architecture? What is meant by deterministic? What are the 2 types of new computers talked about? Summarize DNA computers: Summarize quantum computers:

What is Artificial Intelligence (AI)?

Additional Notes