# CTE AP COMPUTER SCIENCE

PS 1:  Representing and Transmitting info:  Sending and Receiving binary messages, Encoding and sending number/coordinates, and text

PS 2:  Inventing the Internet:  IP Addresses, Packets, and Redundancy.  Routing, DNS, Protocols and Abstraction

PS 3:  Encoding and Compressing Complex info:  Use Text compression and be able to encode images

PS 4:  Manipulating and Visualizing Data:  How to interpret visual data, and communicate with visual data.  Cleaning data and making summary tables.

PS 5:  Programming Languages and Algorithms:  Design Algorithms, write procedural Abstractions and top down design.  Write functions and loop documentation.

PS 6:  Implications of Big Data:  How is big data processed in the real world, Identifying people and the cost of "free", Foundation of encryption, and Asymmetric and Public Key encryption

PS 7:  Event-Driven Programming:  Designing event driven apps that implement user driven input and variables, Boolean logic, and conditional statements

PS 8:  Programming with Data Structure:  Processing Arrays, While Loops, Simulations, and Functions that return values

PS 9   9-10.RST.4 Determine the meaning of symbols, key terms, and other domain specific  words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

PS 10  9-10.RST.7 Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

PS 11  9-10.WHST.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

PS  12  9-10.WHST.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation