

Guided Review – AP Computer Science Principles

Chapter 1 – The Internet

Protocol :

Bitrate vs. Latency:

Binary Numbers and How to convert them to decimal:

- Binary: 10101 Decimal: _____

- Binary: _____ Decimal: 425

IETF:

Net Neutrality

Censorship:

Layers of Protocols in the Internet: (bits, packets, IP, TCP, DNS):

Chapter 2 - Digital Information:

Compression: Lossy vs. Lossless

Pixels and RGB (dark vs. light)

Digital Divide

Cleaning data, using pivot tables, making charts

Google Trends

Chapter 3 – Algorithms and Programming:

Algorithm

Abstraction

Parameters

Loops

Chapter 4 – Big Data and Privacy:

Big Data

Moore's Law

Cryptography

- Caesar Cipher
- Random Substitution
- Vigenere Cipher
- Encryption
- Decryption
- Assymmetric
- Public Key Encryption

Modulo

- $47 \bmod 4$
- $8 \bmod 2$
- $2 \bmod 8$

Scams

SSL/TLS	DDoS	Phishing (example)	Virus

Chapter 5 – Building Apps:

Array/List

Key Event

For Loop

While Loop

Return Value

Data Type

Global vs. Local Variables

Selection	Iteration	Sequencing

*Remember to look at old reviews

*Vocab is key

*Remember there is a reference sheet for coding – be familiar with how it works