## AP Computer Science Principles Unit 4 Test Review

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- Big Data -
- Moore's Law –
- Caeser Cipher -
- Cipher –
- Cracking encryption –
- Decryption -
- Encryption -
- Random Substitution Cipher –
- Vigenère Cipher –

•	Computationally Hard –
•	Asymmetric Encryption –
•	Modulo –
•	Public Key Encryption –
•	SSL/TLS –
•	DDoS –
•	Phishing –
•	Virus –
•	Two-Factor Authentication –

## Please answer the following questions:

2. What is different about Big Data compared to data we have learned in the past and what is an example of it?
3. Explain one data innovation and how it directly uses, produces, or consumes data (different from the one you wrote about on the mini-project).
4. What is meant by the title "The Cost of Free" in lesson 4?
5. Why is the Vigenere cipher harder to crack than a random substitution cipher?
6. Why is modulo used in public key cryptography?

7. What is 37 mod 10?
8. What is 14 mod 7?
9. Read through "How to Not Get Hacked" on Code Studio (there is also a link in Google Classroom). Jot down some notes about security on the Internet.