Outline:

Use selected on-line articles to explore current issues related to crypto currencies such as BitCoin. A focus for learning is: the underlying technologies, impacts on society, and impacts on the environment.

Objectives:

* C1.4 describe how electronic access to information influences our everyday lives.
* C2.1 describe the negative effects of computers and computer use on the environment.
* C3.1 describe legal and ethical issues related to the use of computers.

**Level 1: Cryptocurrencies & Blockchains**

Read the following resources before answering the questions below:

* <https://www.investopedia.com/tech/most-important-cryptocurrencies-other-than-bitcoin/>
* <https://www.investopedia.com/terms/b/blockchain.asp>
* <https://www.cryptoandgamers.com/>

1. What is a “cryptocurrency” and how are “cryptocurrencies” different from traditional currencies (money)?

Cryptocurrency is virtual or digital money which takes the form of tokens or “coins”. It is different from traditional currencies as it is generated, stored, and transferred securely and usually anonymously. They are also designed most of the time to be free from government manipulation and control.

1. BitCoin is the leading cryptocurrency that most people know. What are some other cryptocurrencies and what are their unique features?

Some other cryptocurrencies than BitCoin are Litecoin(LTC), Ethereum(ETH), Zcash(ZEC), Dash(DASH), Ripple(XRP), Monero(XMR), Neo(NEO), Cardano(ADA), and EOS(EOS). Litecoin has a faster block generation rate that results in a faster transaction conformation. Ethereum has been built to and run without any downtime, fraud, control, or interference from a third party.

1. “Blockchains” are the basic technology behind cryptocurrencies and other emerging technologies. Explain blockchains work with respect to:
   1. What they store
   2. How they work
   3. How they are secure and private
   4. How they use public and private encryption keys
2. How does BitCoin use blockchains?
3. What are some other real-world applications of blockchains?
4. What are some advantages and disadvantages of blockchains?
5. Blockchain based games are the latest development in the gaming industry. Research the topic “Crypto Games” (google) to answer the following questions.
   1. What are some interesting Crypto Games available for Android or iPhone?
   2. How are they different from conventional games?

**Level 2: Bitcoin & The Economy**

**Level 3: Bitcoin & The Environment**

Resources:

* Guidelines for writing a supported opinion paragraph (SOP)

<http://schools.peelschools.org/sec/fletchersmeadow/studentlife/OSSLTprep/Documents/Sample_%20Writing%20a%20Supported%20opinion%20paragraph.pdf>