Read the following resources before answering the questions below:

1. <https://www.theglobeandmail.com/report-on-business/rob-commentary/cryptocurrencys-crash-is-a-matter-of-when-not-if/article37257013/>
2. <https://www.cbc.ca/news/business/hut8-medicine-hat-bitcoin-mining-1.4834027>
3. <http://www.bbc.com/news/business-42237432>

Guidelines for writing a supported opinion paragraph (SOP)

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

**Level 1: Bitcoin & Cryptocurrencies**

1. List three ways that “cryptocurrencies” (e.g. Bitcoin) are different from traditional currencies (money).

~Cryptocurrencies lack the backing of an established government or financial institution

~Transactions occur under an “anonymous” cloak

~They don’t actually “exist”; Bitcoin is online currency and not physical money

1. List one advantage of Bitcoin over on-line payment services such as PayPal.

An advantage of using Bitcoin over online payment services like PayPal is that Bitcoin is anonymous and secure, meaning that’s a very small chance that your privacy will ever be breached.

1. List three types of organizations (or types of users) that would benefit in a positive way from the use of “cryptocurrencies”.

~Criminals that hack computers and hold them for ransom

~People that avoid taxation

~People that aim to move assets from countries that enforce currency-exchange controls

1. Bitcoin claims to be anonymous. Is this true (explain)? How could someone find out your identity?

Bitcoin isn’t completely anonymous. Each transaction is associated with the sender’s and receiver’s Bitcoin wallet address. Additionally, anyone that would want to convert Bitcoin into real money would need to eventually perform a transaction that associates their cryptocurrency wallet with their bank account, so they’re no longer left anonymous.

1. Many people claim that the use of "cryptocurrencies" should be restricted because they make it easier for criminals to hide their actions. Is this a valid point of view? Write a SOP to support your argument.

I believe that the use of cryptocurrencies should be restricted because they make it easier for criminals to hide their actions. Bitcoin in particular is largely anonymous until you choose to make a transaction. Criminals wouldn’t ever be found out unless they decide to transfer their money to the real world, and although each transaction is associated with the sender and receiver’s Bitcoin wallet address, it would be difficult to track an individual just through their digital wallet. Additionally, seeing as Bitcoin is entirely online and not face-to-face, it would be hard to figure out who’s really behind all the transactions if all you have is their digital wallet. In conclusion, I think that the use of cryptocurrencies should be restricted because they make it easier for criminals to hide their actions.

**Level 2: Bitcoin & The Environment**

1. What is a Bitcoin “miner” and how big is the Hut-8 facility in the city of Medicine Hat Alberta?

Bitcoin mining is the process by which transactions are verified and added to the block chain, and also the means through which new bitcoin are released. Toronto-based Hut 8 is a 4½-hectare site on the northern edge of the city. It has 56 shipping containers, each filled with 180 computer servers that digitally mine for bitcoin around the clock.

1. Why has Hut-8 decided to locate its facility in Alberta when its head office is in Toronto? What does the city of Medicine Hat provide that is required for mining Bitcoin?  
   The bitcoin mining facility is located right beside the city of Medicine Hat's natural gas-fired power plant and four wind turbines are a short distance away. The bitcoin plant can consume more than 60 megawatts of power, more than 10 times more electricity used by any other facility in the city, according to the mayor. It’s in Alberta so it can take all the energy the power plants and windmills are producing, because Medicine Hat produces all the power the facility it needs.
2. What benefits does the city of Medicine Hat expect to see from this Bitcoin facility?  
   Medicine Hat owns its own natural gas and electricity generation and distribution businesses. The city leased the land to Hut-8 and the facility employs 40 full-time workers. Add up the economic benefits and the city of Medicine Hat will receive a significant financial boost from the new project.
3. What concern does the city of Medicine Hat have about from this Bitcoin facility?  
   There are some concerns surrounding the Bitcoin facility, however. Environmental groups are concerned by the amount of energy consumed by Bitcoin mining, especially in places like Medicine Hat where most of the electricity is produced by fossil fuels.
4. What concern do environmentalists have about the Medicine Hat facility and about Bitcoin mining in general? E.g. how does Bitcoin mining harm the environment?  
   The Bitcoin industry wastes far too much energy. Bitcoin mining uses way too much energy, because the algorithm is designed to waste as much energy as possible. Additionally, the Bitcoin system is designed, so only a limited number of the cryptocurrency can be mined every day. Over time, as more miners compete for a decreasing number of available bitcoins, facilities will have to use more electricity compared to the amount of the cryptocurrency they collect.
5. If Hut-8 wanted to build a facility in Brampton, would be in favor of this proposal. Write a SOP to justify your position.

If Hut-8 wanted to build a facility in Brampton, I wouldn’t be in favor of this proposal, and the city shouldn’t be, either. These facilities use way too much power and electricity that the city needs and uses for daily life, and we shouldn’t be giving all that electricity to Bitcoin miners. Additionally, we need electricity in the cold winters and scorching summers, so giving that to a company that just wants to mine Bitcoin all day would be a bad idea. Overall, I think that Hut-8 should do their business somewhere else.

**Level 3: Mobile Payments**

1. Explain how you could use social media to make payments for things you buy in the store.

There are certain apps that let you make payments for things that you buy in the store. For example, Facebook’s Messenger app and Paypal’s Venmo app allow you to transfer payments with a simple clip.

1. List three ways that social media payments are a positive thing.

~Some apps socialize payments so you could pay a friend for your share of dinner and add a comment that your contact could see, such as 'great restaurant'

~Moving coins and notes around is an expensive and time-consuming activity, so banks will be happy to see the shift from physical to digital banking

~It’s fast and easy to make payments

1. List three ways that social media payments are a negative thing.

~High Street bank branches could disappear within the next few years

~It’s a very easy way for big tech companies to inject themselves into our daily lives and make us depend on them

~Most people aren’t that comfortable with sharing their financial information with these apps

1. Is Canada ahead of or behind other countries in the use of mobile payments? Explain your answer.

Canada is actually behind other countries in the use of mobile payments. There are mobile payment apps in countries like the UK and US, such as Venmo and Facebook’s Messenger app; however, we’re all still behind of China, where mobile payments have been normalized. In less than 10 years they've created their own financial ecosystem, and the behavior of making money transactions using a phone is completely normalized.

1. In your opinion, should mobile payments be allowed in Canada? Write a SOP to justify your position.

I believe that mobile payments should be allowed in Canada. Other countries, such as China (which already has), the UK and the US have already began to normalize mobile payments, meaning that we are already behind. In addition, mobile payments are less of a hassle to do than physical payments; if all you need is a simple click to transfer money, people would rather do that than pull out wads of cash. In conclusion, I think that Canada should allow mobile payments to become mainstream.