Environmental Stewardship and Sustainability

**Part 1 Reflection:**

Write a **very short** summary of each video highlighting something you learned in each.

How It Works – Computer Recycling <https://www.youtube.com/watch?v=zU62hh3DBfg>

\* There are three precious metals that people get from recycling computer components which are gold, silver and copper. Each component in our computer has different way of recycling; however, there are two main methods that were used to recycle everything. The first one is put everything inside the acidic solution and melt the dust after the reaction to get the metal such as gold. The second method is using the electrochemical plating to separate the component which have many metal inside such as gold, silver and copper. These metals after be taken out can be sold to in other industries and people earn profit from selling them. \*

Exporting Harm <https://www.youtube.com/watch?v=yDSWGV3jGek>

\* Beside recycling, exporting the broken computer stuff to another country such as China is a solution to deal with these components because it brings back more money than recycling and it keeps the environment of the country who export things cleaner. However, the country like China have to get the “E garbage” everyday have to deal with the serious environmental problems everyday. The people of China open those computer components everyday by burning, putting them in the acidic solution or just simple using a hard material to break them to get the valuable things inside the computer. As a consequence, lead, beryllium, cadmium release to their land, air and water that kill everything living in their and made the environment die. Moreover, the dioxin gases are also released to the air when they burn the computer board. \*

The Story of Electronics <https://www.youtube.com/watch?v=sW_7i6T_H78>

\* At the beginning of computer manufacturing processes there are some people want to make more profit from making the computer that can not last for a long time, so they can export them when they break to another country and get more profit from selling it. However, it has made so many environmental problems and affected people health. As time goes by, more and more people have frustrated this terrible idea and they asked the people who made computers to make another computer series that can last longer, more friendly to the human and environment by replacing the harmful material that made the computer with others which are better and less baneful. In addition, this idea also prevented or reduced the number of computer parts which are broken from exporting to another country. Nowaday, computers have become safer to anyone.

**Part 2 Short Answers – Guided Reflection:**

Many of the questions below can be answered from the videos we watched in class, however some will require further thinking and research.

1. Would you describe your relationship with electronics to be healthy or unhealthy? Why?

\* I think the relationship with the electronics can be unhealthy because they contain some harmful material inside such as lead, cadmium, mercury,etc…, and we can be affected by the radiation from the electronic devices. Furthermore, using too much electronic devices like smartphone, ipads, computer screen can be bad for our eyes. \*

1. What are the possible health issues that someone may encounter as a result of his/her contact with electronics? What are the possible health issues that we may encounter as a result of our contact with electronics.

\* Using electronic too much especially computer or smartphone can lead to short sighted. In addition, We can be affected by the radiation from smartphone because we always carry our smartphone with us even when we go to sleep. Moreover, with the fast growing of technology, electronic is a bridge that connect people with the world outside by using the social media such as Facebook, Tumblr, Instagram,... that can make depression at human.\*

1. What are some of the benefits of using electronics?

\* Electronics help us:

1. Get the new information faster and more effective.
2. Make our life easier.
3. We can using electronics and make the program on them so they can help us to do some jobs automatically.
4. Electronics thing such as robot can be used to explore a dangerous place that human can not go in there such as the deep of the ocean or a field mine or any where that we don’t know what we may meet.
5. Electronic is an important tool that we can not miss especially in the place that we need security especially with the banks, schools, hospitals or just simple the personal using. \*
6. Do the benefits of computers and other electronic technologies outweigh the detriments of their use?

\* I think it does. We can not deny that the garbage which is called E-waste is a big problem, or overusing electronics can make the bad healthy problems. However, those problems can be solved and reduce the human and environmental problems at the minimum amount if we do the recycling and use the computer in a smart way. In addition, computer has helped us so much that we can not live without them for a day. Without electronics, we can not predict the movement of weather or anything inside or outside our land. Moreover, electronics help us to save many people. If we don’t have the electronic equipments in hospital, we both know the consequences. As time goes by, electronics have played an important part in every single part of our life. Almost areas in any career need electronics to do their jobs, for it make their life easier, more effective, save time with the high yield and automatically do everything in the fastest way. \*

1. What is planned obsolescence?

\* Planned obsolescence is a way of design that limit the useful life of something. With the fast growing of economy, computer have been an important part and people get the money from selling computer. Planned obsolescence in designing computer make them easier to be broken and when the people see the money that the have to pay to fix that computer is much more expensive than just buying the new one, they will buy the new one. Then the broken computer will be exported to other country and people get more and more money from that. This is how planned obsolescence works.\*

1. How long should a consumer actively use a working electronic device?

\* I think any of us should use a working device if they can be still useful and still working well. If we already have an electronic device, and it hasn’t broken yet, why do we need to replace it with another one ? \*

1. What can you, your family members, and local community do to decrease the amount of e-waste generated each year in Canada?

\*We can do by these solution:

1. Keep using an electronic device if they can be used well.
2. If the computer is getting bad and broken especially with a laptop, we should figure out the reasons and how to fix it. Don’t throw it away and buy the new one immediately.
3. Using a computer which is suitable for you.
   1. If you are a person that working on the computer field, you should take a computer that is strong enough, reliable, have the military test and can last for a long time, so you can use that computer for a longer time.
   2. If you are a person that working in the office and don’t really need a heavy computer as the one of the engineer. You should take the one that don’t have too many functions out of your using. Those computers have more function are easier to be broken, and they also have more bugs than the one that is cheaper and don’t have many functions.\*
4. How can electronics be used to do good, reduce resource use and support environmental protection?

\*Electronics can be used to do good, reduce resource use and support environmental protection by:

1. Make and design the computer that can last for a long time.
2. Try to use the material that friendly to the environment to make a computer.
3. If the computer break, we can recycle them to take the component inside which can be used to make the new electronics.
4. We can also bring the computer to the store and fix them if it broke. Sometime the electronic stuff broke, but we just need to replace a small part inside them to make it work again. We can both save our money and the environment. \*
5. Research and identify some government agencies and community partners that provide resources and guidance for managing e waste
6. United States Environmental Protection Agency (EPA).
7. Electronic Recycling Association (ERA).
8. Sims Recycling Solutions.
9. E-Stewards
10. WR3A.

**Part 3 – Infographic**

Use the above information to create an infographic, example <https://piktochart.com/>

Include images to make it look appealing. (refer to examples in google classroom)

Dear Sir,  
My infographic is quite long so I put it on the google drive.  
I will put the link at here   
Thank you Sir.

<https://drive.google.com/open?id=13MryBbNiqJ3jrV5I3qY9acWT1l4rHpGc>