

## Unit 2 – Technology and the Environment

### Reading 1

#### TOXIC TECHNOTRASH



Technotrash, also called electronic waste or e-waste, is any broken or unwanted electrical or electronic device, and is currently the most rapidly-growing type of waste. If you just throw away technotrash with the regular trash, it usually ends up in a landfill. Most electronics contain non-biodegradable materials, and heavy metals and toxic materials like cadmium, lead and mercury. Over time, these toxic materials can penetrate the ground, where they can contaminate the water we drink, the plants we eat and the animals that live around the area. Many European countries have even banned technotrash from landfills.

These toxic materials can cause all kinds of bad effects including nausea, diarrhea, vomiting and even cancer. If you keep eating and drinking contaminated food and water, these toxins can build up in your body. If you eat animals that have been contaminated, you're getting a double dose of toxins. What's even worse, your body can't properly process some of these metals, and so they might take years to get out of your system.

To help protect the environment, don't put technotrash in with the rest of your household's garbage. Check with your local recycling center to see if they take technotrash. You can also **ship it** to a company that specializes in disposing of technotrash, like GreenDisk.

### **Tips for Recycling Technotrash**

Before you recycle your technotrash, check out these tips:

#### **Sanitize your Hard Drive**

Before donating a machine, be sure to remove all of your files and data from it. Most people will just try to drag everything to the trash can or recycle bin, but this only partially erases the information! Cyber criminals can find this “deleted” information and use it however they want. To really protect yourself, you need to run a program that “sanitizes” your hard drive. These programs, which can be found online, work by replacing all your data with a series of useless nonsense. That way, your information is safe, and your good action won’t have any negative consequence!

#### **Consider Donating your Mobile Device**

There are actually a LOT of great things your old mobile devices can do for people. Whether that means helping soldiers **overseas** talk to their families or helping people who don’t have money to buy a new cell phone, these old devices can be more useful than you think.

#### **Raise Some Funds**

Because electronics contain precious metals including gold, silver and copper, technotrash can actually be worth a little money. Why not hold a community fundraiser to collect and dispose of everyone's technotrash? You'll be helping both your community and the environment at the same time!

#### **Reuse Those Ink Cartridges**

Many locations that sell new printer ink cartridges will refill your old cartridge for a fraction of the cost. Each cartridge you throw away takes anywhere between 400 and 1,000 years to decompose, and on average, there are 11 cartridges thrown out every minute across the globe! Not all cartridges can be refilled, and even cartridges that you've filled in the past will eventually break down after continual use. When this happens, take them to the store where you bought them and recycle them. Sometimes, the store will even give you a discount on your next ink cartridge.

*\*Adapted from <http://www.carnegiecyberacademy.com/facultyPages/environment/issues.html>*

Answer the following questions:

1. What is stated about technotrash in paragraph 1?
  - a. It is the most damaging source of pollution in our planet.
  - b. All devices contain mercury and lead.
  - c. It can pollute our natural resources.
  - d. European countries have banned devices that are non-biodegradable.

2. What is NOT stated about toxic materials in paragraph 2?
  - a. They can make you throw up.
  - b. They can cause major diseases.
  - c. They can reproduce in your body.
  - d. They can kill thousands of animals.
3. The word **ship** in paragraph 3 is closest in meaning to
  - a. send
  - b. navigate
  - c. integrate
  - d. throw away
4. The word **it** in paragraph 3 refers to
  - a. garbage
  - b. company
  - c. technotrash
  - d. recycling center
5. Why is it necessary to “sanitize” your hard drive?
  - a. Having a dirty computer can pollute more the environment.
  - b. By doing this, personal data may not end up in the hands of criminals.
  - c. If you do this, it will be easier to arrest talented and dangerous hackers.
  - d. Because in this way, some companies can make money by selling some useful software.
6. The word **overseas** in paragraph 5 is closest in meaning to
  - a. far
  - b. ocean
  - c. beach
  - d. abroad
7. According to paragraph 6, what are the main purposes of having a fundraiser? (**Choose 2 answers**)
  - a. Raise funds to buy gold.
  - b. Have fun with your neighbors.
  - c. Get rid of electronic devices you don't use.
  - d. Collect money to use it for the benefit of the community.
8. What is NOT stated about cartridges in the last paragraph?
  - a. Cartridges can be astronomically expensive.
  - b. You can use your old cartridge to buy a new one.
  - c. You can save money if you refill your old cartridge.
  - d. Around 600 cartridges may be disposed every hour.