

## The Wider Effects of Tech 101

### How does technology harm the environment?



**The production of Consumer Electronics**

- Making tech produces CO2 emissions
- The factories also make a radius around them toxic



**Consuming non-renewable materials**

The depletion of natural resources is a huge problem we are facing



**E-Waste**

- 50M Tons of E-Waste is generated every year
- Only 10% of tech is recycled correctly



**Destroying Ecosystems**

Old tech usually ends up in landfills, which takes up space that would otherwise be a habitat for animals



**Endangering Animals**

Consumer electronics contain toxic materials like mercury and lead which are toxic to all life forms

### What can we do to reduce the negative impact?

#### The Four R's

**Reduce**

Take care of and use your electronics for as long as possible, hold out on buying ones each year

**Reuse**

Sell, gift, or repurpose your old tech

**Repair**

Use resources like iFixit to repair old devices, it might even become your next hobby

**Recycle**

Make sure to give any old/broken tech to organizations who specialize in tech recycling



**Energy Star Products**

Look for products labeled Energy Star as they are more efficient



**80 PLUS Certification**

This label is synonymous with efficiency and quality for computer components



**Choose The Right Brands**


Prioritize brands that have a commitment towards reducing their environmental impact

### What are common effects technology has on our health?

**Bad posture**

Bad posture when using computers cause:

- Back and Neck pain
- Headaches
- Joint pain



**Carpal Tunnel**

Using a computer with a mouse or trackpad commonly results in Carpal Tunnel, which causes pain in the inner wrist

**Obesity**

Sitting at a desk for long stretches of time is a major contributor towards rising obesity rates. It is recommended to:

- Take frequent breaks, outside if possible
- Go to the gym and/or jogs on your free time



**Eye Strain**

Reduce the damage screens cause by using:

- The 20/20/20 Rule: Every 20 minutes, focus on an item 20 feet away for at least 20 seconds

### Other ways to reduce these negative effects:

#### Tips for a better posture

- Sit upright at an angle of 90 degrees
- Use your whole arm when using the mouse
- The monitor should be at eye level
- Ergonomic peripherals help immensely towards using tech healthily



**Stand Up Desks**

The use of stand up desks is widely recommended by doctors for who can afford it



**Laptops**

Laptops are designed to be used for short bursts of work it is recommended to use them as such



**Take Breaks**

Every 20 minutes, take a 10 second break to stretch and adjust your posture

### Here are a few organizations to support:



EPRA is a non-profit organization from Ottawa. It provides safe and sustainable recycling for old or broken tech at over 2,500 drop-off sites



JTF are specialists here in Ottawa who take it upon themselves to remove E-Waste from commercial and residential buildings



Part of Quantum's mission is to salvage and recycle for reusability, calling themselves "an end-of-life electronics recycler"

The Wider Effects of Tech 101 by Haytham A, ICS3U