TINS   Recycle and Build a Computer- Life Cycle

1.   [Watch This Video](#)---Recycle A Computer

2. [Watch This Video](#)---Build A Computer

3. Review the two documents after this page. After the videos, start a Word/Google document, save as recycling-last name. Write a half-page summary of the video- use your 5 W's to guide you: Who, What, Where, Why & When. Provide information from each video- Recycle and Build

4. Using Google Maps, locate three (3) Electronics recycling centers nearest zip code 91377

5. Using each center's website, list equipment they WILL accept and equipment they WILL NOT accept. List limits on donations, hours of operation, and other relevant information for each center.

6. Navigate to City Of Thousand Oaks, Westlake Village and City of Simi Valley government websites. Locate the information for residents' of those communities how e-cycling is done in each city. List in your review document using a table format the information gathered.

7. Research what preparation a computer user would need to do to donate their computer. List the steps to safely donate a desktop and a laptop. (Think data security.)- See attached sheets.

8. Save as recycling_Your lastname-submit via GDrive

9. ** Extra Credit**- At home, look in your home and identify possible e-waste. Discuss with your   parents   a   plan   to   correctly   recycle the equipment. Send E-mail (eamerikaner@opusd.org) to Mr. Amerikaner and provide the list of equipment and your plan to dispose of it.
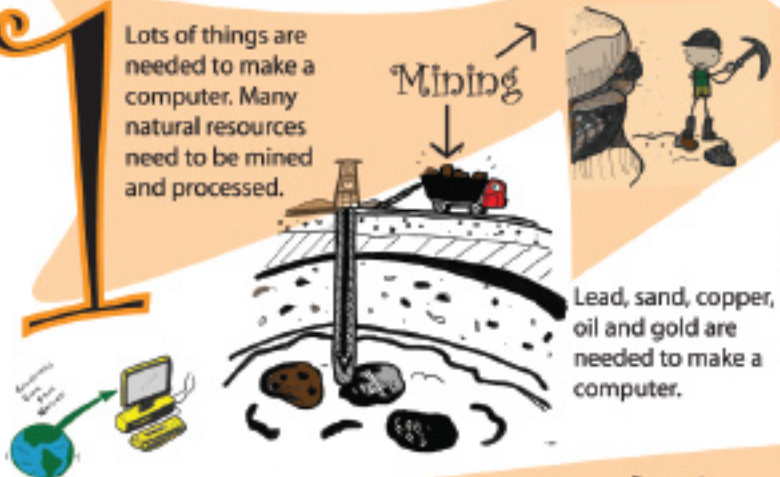
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What is the life cycle of a computer?

Every stage of a computer's life has an impact on the environment from mining the resources through to how it is used and then how it is disposed of. Use this poster to find out ways that you can help reduce your computer's environmental impacts!
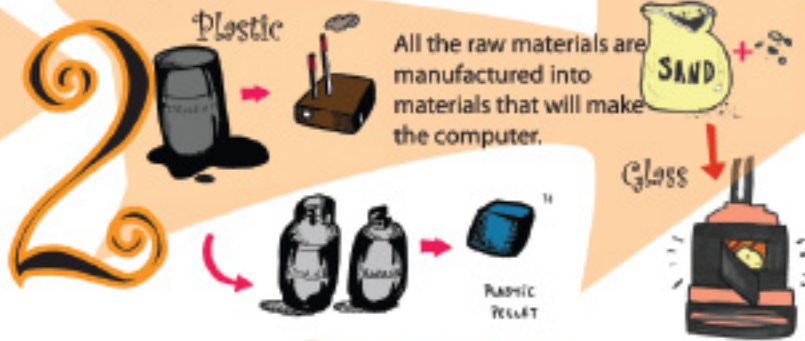
1 Extraction of Materials

Lots of things are needed to make a computer. Many natural resources need to be mined and processed.

Mining

Lead, sand, copper, oil and gold are needed to make a computer.

2 Manufacturing materials

Plastic

All the raw materials are manufactured into materials that will make the computer.

SAND +

Glass

PLASTIC PELLET

3 Making the computer

Once the raw materials (plastic, lead, glass and gold) have been processed the computer is assembled in a factory

Recycle

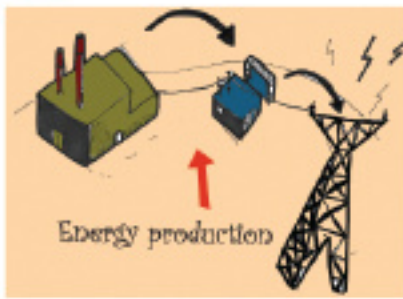The best way to reduce the environmental impact of your computer is to:
★ Use it as long as possible
★ Donate it instead of throwing it out
★ Make sure it gets disassembled and recycle for its usable bits like the gold & plastics
★ Always RECYCLE your old computer

Donate

OP SHOP

FOR SALE

End of life

Computers contain many toxic substances like lead that cause major problems to humans and the environment when they are disposed of in landfill. Never dispose of electrical goods in the general waste.

7

Landfill

Energy

Energy is used at every stage of a Computers life. Electricity can come from coal, petrol or gas, all of these contribute to climate change.

Energy production

Did you know?
Did you know that around 182,000 computers end up in landfill every year in Victoria?

Quiz
Where you can donate your old computer?

4 Packaging

Once the computer has been it is packaged. This is to make sure that it doesn't get damaged as it is transported. Packaging is usually made from plastic and cardboard.

6 Usage

Computers are very useful for work and fun, but they need electricity to work. Saving electricity reduces impacts so always turn it off when you are not using it.

5 Transport

Most computers are made overseas and have to travel to Australia, then to the shops and then to your home or school. All forms of transport use fossil fuels and realise CO2

Retire that computer more safely

If you're ready to replace, sell, or retire your old computer, it's very important to eradicate personal data stored on its hard drive before unplugging it for the last time.

You should always remember that even though you manually delete computer files, an identity thief might still be able to recover them, possibly putting you or your family at risk.

Files you should remove before you donate or sell your computer:

- E-mail contacts
- messages
- All documents
- All files in the operating system recycle bin or trash folder
- Internet files
- All non-transferable software (most software is transferable if you have the original disks and product key)

Options for removing files from your computer:

1. Remove the files yourself at home using disk-cleaning software. On Windows 7 and Windows Vista you can <u>clean up files with Disk Cleanup</u>. If you have any sensitive files on your computer, you can also use a third-party application. To find software that works with your version of Windows, visit <u>Bing</u> and search for "file shredder" or "secure file deletion."
2. Call the computer manufacturer's technical services department and ask how to delete personal files (your computer might need to be under warranty for this service).
3. Take your hard drive to a local reputable computer supplier to have them safely overwrite your files.

Once you've cleaned the personal data from your old computer (and you don't plan to or are unable to sell it), what should you do with it? Consider donating or recycling.

Donate

If your unwanted computer still works, <u>donating it</u> is probably the best way to go, and doing so will help keep toxins such as lead, mercury, and other electronic byproducts out of the environment.

Each computer dumped in a landfill is a missed opportunity to provide a computer for others to use through a nonprofit or school-based refurbisher.

In addition, depending on the current market value of your donated computer, you might be able to deduct its value from your taxes (refer to current federal and local tax laws for more information).

Recycle

If your computer is an older model (five years is typically the maximum for donating), doesn't work, or donating isn't otherwise an option, you can dispose of it responsibly with the help of a qualified recycler near you, such as those found on the <u>National Center for Electronics Recycling</u>.

For more information, see <u>Recycle your electronics waste</u> and <u>Microsoft's Authorized Refurbisher Program Gives Computers a Second Life</u>.