

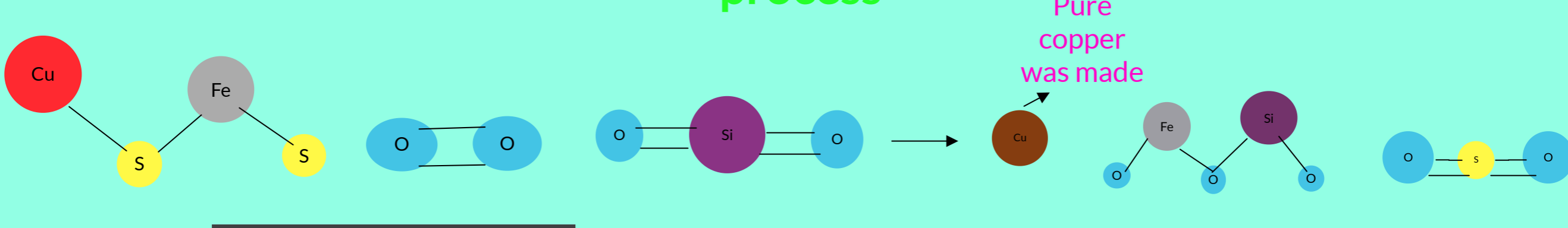


The Steps- Raw Materials, Manufacturing, and Disposal

1.) Raw Materials

When people mine in an open mine pit for copper ore which is used to make copper there is a lot that happens and there is even a chemical change when the SiO_2 is burned the chalcopyrite which is CuFeS_2

Here's the process



Chalcopyrite burned with SiO_2

This is a chemical change. Here you see the Chemical change of CuFeS_2 being burned with SiO_2 . A chemical change is when a molecule is changed because of new atoms being combined or new atoms being moved around.

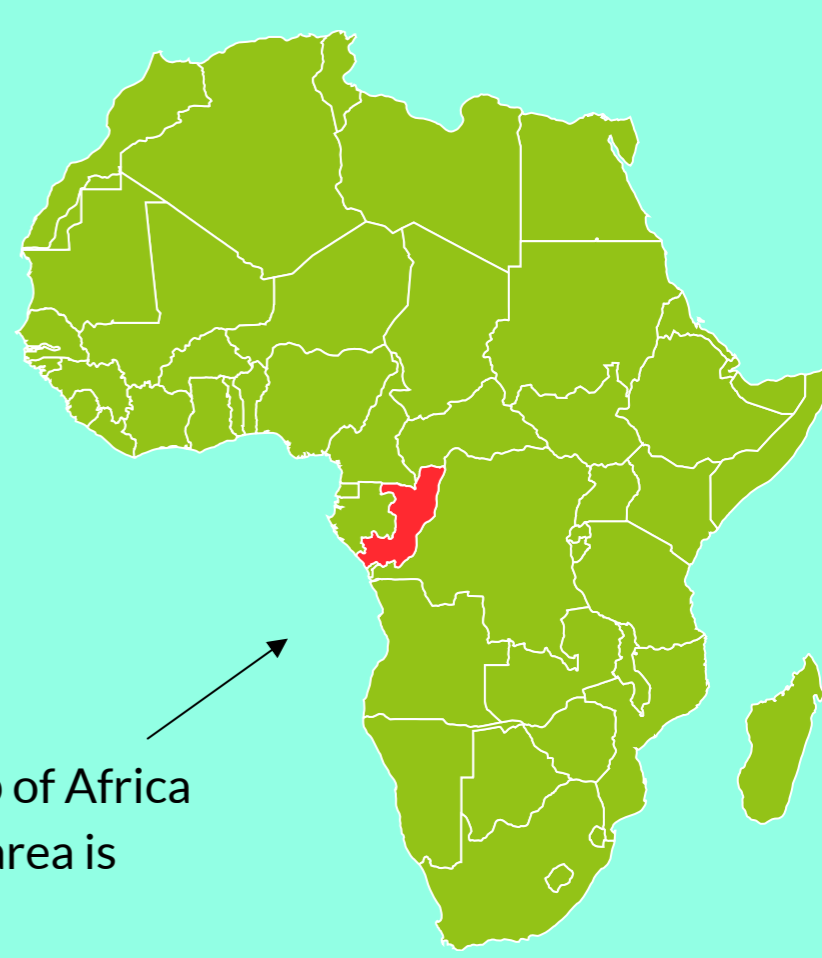


Tantalum

The reason there is a picture of a phone is because in Congo there is tantalum which is used for phones and Tantalum is bad to have so its not allowed to be in phones. War Lords used the money from selling tantalum for their army's, to get advanced technology.

Still Raw Materials

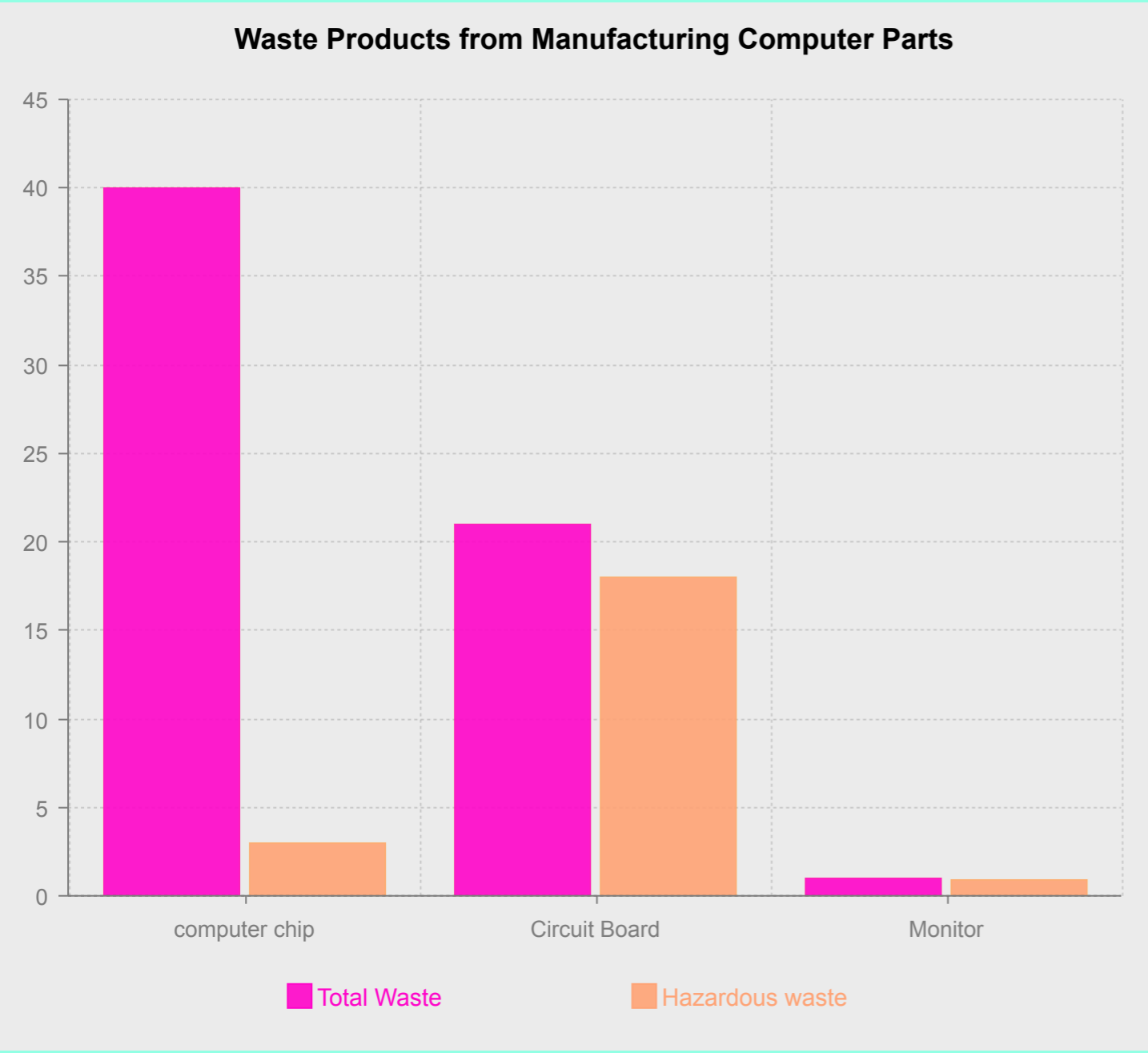
The reason that the phones were called, "blood phones" is because the tantalum which is inside of the phone is causing bloody wars. Therefore the phones are called "blood phones" for having the tantalum inside of the phone.



This is a Map of Africa and the red area is Congo.

2.) Manufacturing

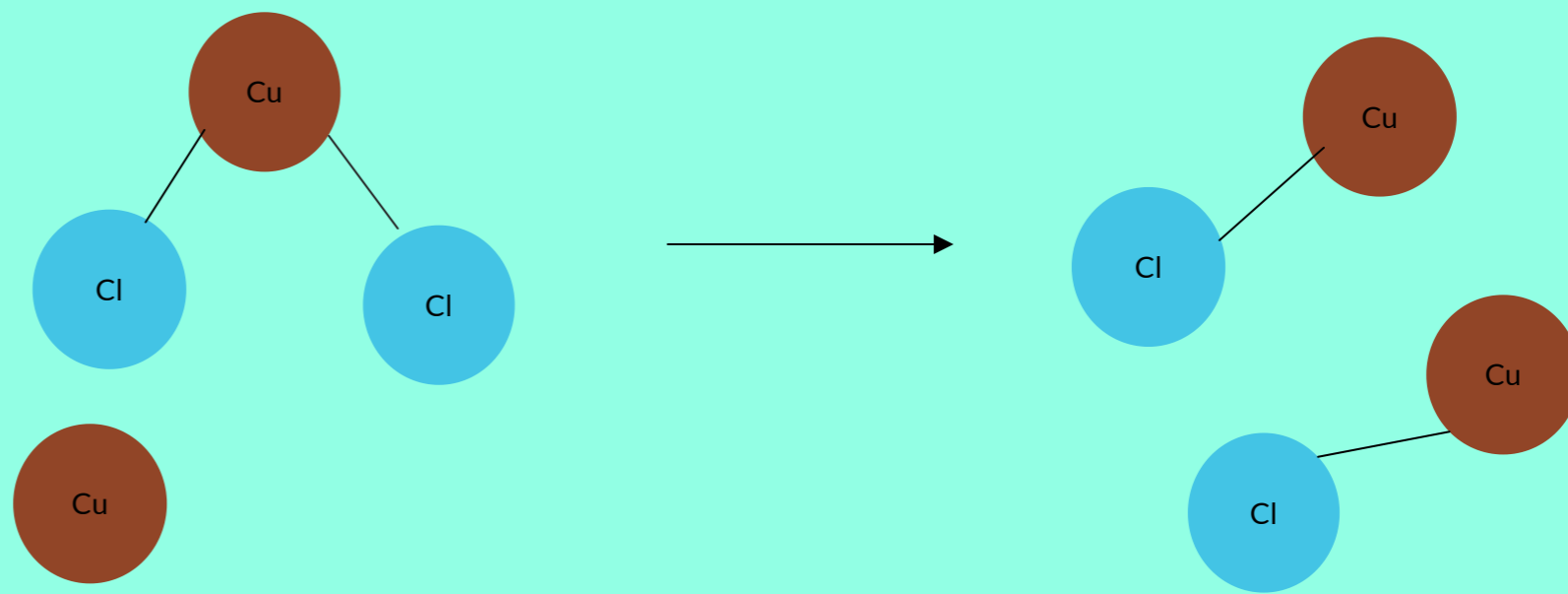
In a lab we also made circuit boards which is a part of a laptop but there are a lot of down sides to making our computers. The computer alone is bad for or environment.



The computer chip has 40 kg of total waste and 3 kg of that is Hazardous while the circuit board has 21 kg total waste and 18 kg is Hazardous. This is telling us the waste created from manufacturing one computer alone which is a lot.

Circuit Boards

The Etching solution which is CuCl_2 is mixed with one copper atom the CuCl_2 is broken up and then there is only CuCl and the other copper and the other Cl get mixed creating 2 CuCl total.

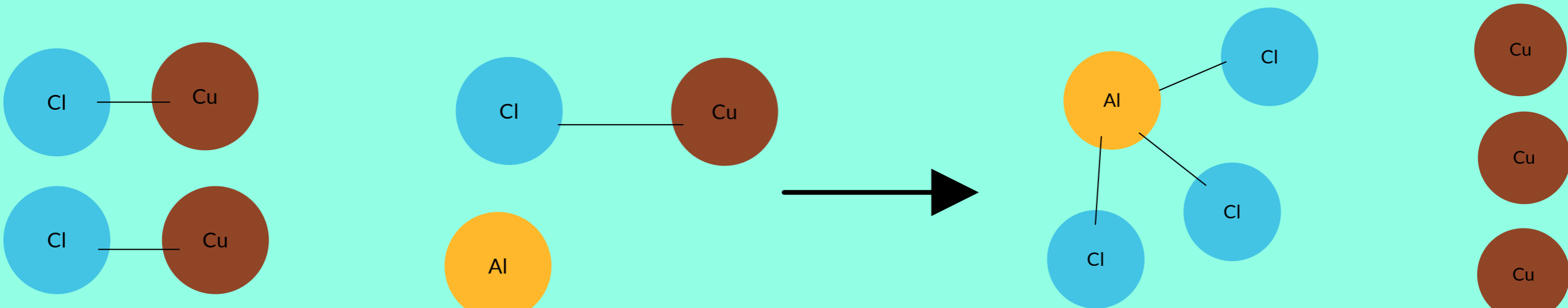
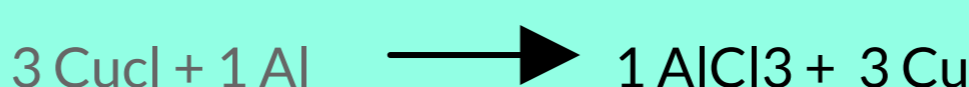


3.) Disposal

Dropoff Location	Final Location (if given)	Number of Stops in between	Time in Transition	Distance Travelled
Lakewood, NJ	Sheung Shui	2	65 days	13,044 km
Seattle, WA	Foshan	8	99 days	14,551 km
Renton, WA	Yuen Long	5	79 days	didn't say
Cadillac, MI Goodwill	Kwan Tei North Tsuen	6	320 days	13,282 km
Lawrence, NH	Foshan, Guangdong	7	152 days	13,004 km
Kentwood, MI	Henon Sheng	5	217 days	13,606 km

This represents the different areas that our E-waste is shipped after our electronics are messed up. E-waste is a shorter way to show Electronic waste so the waste from electronics. E-waste is impacting our environment terribly. E-waste is causing the environment to be off balance and the environment is being polluted.

Still Disposal



The models show that there is a chemical change occurring because the molecule changed from CuCl to AlCl_3 because it was mixed with Aluminum which cause a chemical change. The reason we mixed it with Aluminum is because we wanted to see if we could get some of the copper back that way we wouldn't pollute the environment with Hazardous waste.

THE END