

William walked through the doors of his home, his shoulders sunken and his heart full of despair. The day at work had been grating. Ten calls from unsatisfied clients, a threat from the IT manager, and an insinuation by his boss that he might be fired soon. He sat down on the couch and looked at his watch. Formerly functional, it had been destroyed when it fell off his wrist and onto the road. When he remembered where it was and had rushed out of his office, it was damaged beyond repair. He wanted to buy another watch, but every good watch cost way too much due to inflation. He couldn't just go on living without a watch, though. It was crucial for his job. However, while sitting on the couch, an idea struck him. He could buy the base components of a watch, and assemble it, as he had some engineering knowledge. He stood up and strode over to the computer, activating it.

After a decent time looking up stuff, William determined that the standard components of a watch would be too expensive to buy and assemble. What about the raw minerals, though? What if he got the raw metals, dusts, and the like and processed them into a watch? Surely that would be cheaper. Invigorated by that idea, he went back to searching. The first component he investigated was the microchip. He found that microchips were made primarily out of silicon wafers and transistors. However, electronic components can't be mined, so he went further. "Sand," William read, looking at what wafers were made of, "silica sand. Where can I buy this?" After looking for a bit, he found where he could get the silica from: Winnipeg. He was happy about that, as Winnipeg was quite close, so shipping costs wouldn't be a major factor. Once he had found out how to order it, he turned to the matter of the transistors. What were they made of? "Germanium, silicon, arsenic, and gallium," he read, "are all part of transistors. Well, this is interesting. I know where to find silicon, but what about the others?" He looked up mining locations for germanium, arsenic, and gallium and found that germanium was mined in BC and gallium in Saskatchewan. The closeness of the gallium was excellent, but it was frustrating that germanium was over a thousand kilometers away. Arsenic was even more frustrating, as most sources considered it a toxin. However, he eventually found useful arsenic mined in the Appalachian mountains in Quebec.

Having found all the base resources of the most complex component of the watch and looking for something more straightforward, he looked at the watch strap, which was simpler, being made out of plastic. "Polyacrylate," William read, confused. "How is this made? Isn't this the stuff paint is made of?" Turns out, he was wrong. It resulted from the complex and tedious process of oil refinement, and was most certainly not in paint. He wasn't interested in spending money to refine oil, so he just found an oil supplier and refiner in Alberta.

He was tired by this point, so he went to bed and woke up ready to finish his mission. Luckily, it was a weekend, so he could get right to it. He started by looking at what the watch casing was made of, and he found after minimal searching that it was made out of...

"Stainless steel," he read, "of all things. Isn't that the stuff pans are made of? It shouldn't be too hard to make!"

William immediately learned that real life is not that simple, and stainless steel is a pretty complex alloy of steel and chromium with nickel, manganese, and molybdenum as additives. After facepalming, he collected himself together and started journeying down the rabbit hole. Iron, which is blasted into steel, is found in Newfoundland and Labrador, along with nickel. Manganese is mined in New Brunswick, and the nickel is mined in BC. These locations caused him much frustration, as none of them were close. The chromium added to the frustration, as it

was mined in Ontario's Ring of Fire, which was a very vague location name. After tackling stainless steel, he took a break for his sanity, and finally tackled the resources of the final component: the battery. He knew that iron and nickel were already mined in Newfoundland and Labrador, which was nice. Magnesium is mined in BC, which made him wonder why so much mining occurs in BC. After concluding that wasn't important, he found that the final part of the battery, lithium, was mined in Quebec. Looking at his massive list and all the prices, he realized that it would be cheaper to buy a ready-made watch, and that his entire journey was pointless.

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