Elementary My Dear Watson

The solution to the mystery that follows depends on your knowledge of chemical elements, symbols, and formulas, Dr. Watson. If a symbol is given, substitute the name of that element; if the name is given, substitute the symbol. The names of compounds may also be symbolized by formulas. Do not fail me, good doctor. The solution must be in my hands by midnight a week hence, or the consequences could be devastating for your grade!

Twas the week before Christmas, when Inspector Lestrade came to me with a most distraught gentleman in tow. (Helium)_____ explained that the gentleman had purchased several pieces of (Ag)_____ and (Au)_____ jewelry for his wife (or mistress, (iodine)_____ surmised), which had disappeared during a street (carbon + argon)_____ ride ((nobelium)_____ doubt to see (hydrogen + erbium)_____!). The victim interrupted with "You must (Fe)_____ this out before the 24th, Mr. (Ho)_____! I will not (Fe$_2$O$_3$)_____ until the jewels are recovered and the culprit made to (S)_____ as (iodine)_____ have this day! (holmium + tungsten)_____ dare someone (sulfur + tellurium + aluminum)_____ from *me*! I'd gladly (Ba)_____ with the fishes and watch him (Zn)_____ in the Thames!" His diatribe did tend to (B)_____.

(Oxygen + nitrogen)_____ questioning, I learned the (carbon + argon)_____ was number (Sn)_____, an express which did not stop during (hydrogen + iodine + sulfur)_____ trip. (Arsenic)_____ to unusual events, (helium)_____ remembered a (Cu)_____ evicting the occupants of the seat behind him and sitting there himself. Enjoying the ride, (helium)_____ was just thinking "these areas (As)_____," when a bad jolt made the (calcium + selenium)_____ of jewelry (sulfur + lithium + phosphorus)_____ between the seat and back of the bench (helium)_____ occupied. The (Cu)_____ retrieved it for him. (Oxygen + nitrogen)_____ checking later, he found the jewelry missing from the (calcium + selenium)_____. (Astatine)_____ their destination, (helium)_____ and the (Cu)_____ searched everyone, and each other, (arsenic)_____ well as the (carbon + argon)_____. (Nobelium)_____ jewels were found.

By this time, Lestrade seemed eager to (beryllium)_____ rid (oxygen + fluorine)_____ our pompous victim, as (tungsten + arsenic)_____ (iodine)_____, (Indium)_____ private, the Inspector explained that he wasn't personally. (Sb)_____, but just wanted the theft cleared (uranium + phosphorus)_____ quickly (sulfur + oxygen)_____ he could get (oxygen + nitrogen)_____ to matters more important than petty theft. (Iodine)_____ agreed to help, not to save the Inspector time and embarrassment (tungsten + helium + nitrogen)_____ he failed, (arsenic)_____ I (potassium + neon + tungsten)_____ he would, but because I had the (calcium + selenium)_____ already solved. Informed of this, the Inspector cried, "(Sulfur + oxygen)_____ fast! (Hydrogen + oxygen + tungsten)_____?!" My only reply (tungsten + arsenic)_____ that he meet me after (I)_____d, armed, and carrying a (Ni)_____.

(Astatine)_____ dusk, the Inspector and (iodine)_____ rode the next to last streetcar of the day to the end (oxygen + fluorine)_____ the line, the (C)_____. I used Lestrade's (Ni)_____ to pay my fare. (Indium)_____ the deserted (C)_____ I found number (Sn)_____ and climbed inside. Reasoning that the culprit sat behind our victim (Pb)_____ me to examine that seat, and I found scratches on the (F)_____. Prying (uranium + phosphorus)_____ a loose piece of (F)_____, I found the missing (Ag)_____ and (Au)_____ jewelry in a (boron + silver)_____. I substituted worthless (SiO$_2$)_____ to simulate the heft of the (rhenium + aluminum)_____ articles, and replaced the (boron + silver)_____ under the (F)_____. The Inspector and (iodine)_____ then concealed ourselves to await the thief. Nearly dozing (oxygen + 2 fluorine)_____, I was startled by the sound of footsteps echoing (indium)_____ the deserted (C)_____. A shadow entered number (Sn)_____ and I heard the (F)_____ being lifted, a brief silence, then an expletive and "The jewels (Ar)_____!" The Inspector yelled "Police!" and I yelled "(Cs)_____!" as we both jumped into different ends of the streetcar. After a brief struggle, the Inspector had his (Ne)_____ the culprit, (tungsten + holmium)_____ was subdued and handcuffed. I turned (oxygen + nitrogen)_____ the torch and beheld a uniform (oxygen + fluorine)_____ blue with (bromine + arsenic + sulfur)_____ buttons. "(Ho)_____!" exclaimed the Inspector, "It's the (Cu)_____!" "Of course," I replied, "it's elementary, Inspector. He's a (Si)_____ who found his comedy routine impersonating a (Cu)_____ in prison to (beryllium)_____ infinitely (molybdenum + rhenium)_____ rewarding on the outside—almost."

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A CHEMISTRY CHRISTMAS CAROL by Gerald Swenson and Jay Badenhoop (with apologies to C. Dickens)

Can you find the names of the 86 elements hidden in the following story?

In a back street of London, we find the chemistry professor Ebenezer Scrooginger in a mercurial joy, counting his silver and gold. "Praseo- dymium, praseodymium!" he shouts as he pauses over the fees paid for broken beakers. Ebenezer is so mean, that if he ever finds a student overcome by one of his titanium chemistry exams, he never stops to be a good Samarium. Instead, he calls in a teaching assistant and has him platinum. "Are there no chem tutors, no iridium, no study sessions?" he often asked.

Meanwhile, in a stockroom, poor Rubidium Cratchet, the lab technitium, was washing dishes in ice cold water. Ebenezer only allowed him one piece of carbon paper for all the lab reports and one small candle to aluminum. A graduate of Berkelium College in Californium, Rub was no Einsteinium, but he wasn't so-dium, either. He did tend right to bismuth on time. It was six o'clock on Christmas Eve, and Rub asked to go holmium early.

"You've got a lot of gallium," replied Ebenezer. "I'll be francium, but fermium. Hafnium a day's work, halfnium a day's pay."

"That's alright," Rub replied, "I'm antimony, anyway."

Late that night, Ebenezer awoke to see the ghostly face of his de- parted colleague, Lawrencium Marley, who ironically looked worse when he was alive. "Io-dide ne-on to three years ago, and since then, I've had to go out each night, trudging around, carrying these arsenine chemistry exams, and they're heavy as lead! Mend your ways!" Thus the ghost spoke, then departed. That was ytterbium, thought Ebenezer, who had become so yttrium, his hands were shaking. Must be a case of dysprosium from a bit of underdone potato. He tried to forget it and listened to a Donny Osmium album until he eventually dozed off.

At one o'clock, Ebenezer awoke to a cold wind. A young girl with golden hair appeared before him. She waved her hand and the frightened man rose out of bed. The ghost grabbed Ebenezer by the sleeve and rhodium off into Christmas past. They first visited the Chemistry Department of Drogen Fezziwig, Ebenezer's thesis advisor. He was holding a Christmas party, but young Ebenezer was more interested in grading lab reports. "Hi,-Drogen!" laughed Ebenezer, but the spirit told him he couldn't be heard by anyone in the past. The ghost scolded Ebenezer for actinium up. As day turned to night,-Drogen and the others said their goodbyes and went home as Ebenezer sat alone. He began to remember a less pleasant time. In graduate school, Ebenezer had spent so much time studying the oxygen spectrum of the planets Uranium, Neptunium, and Plutonium, he didn't notice when his fiancee, Selenium, left him.

The spirit flew Ebenezer across the Eastern seaborgium, then all over Europium, Francium, Polonium, Germanium, and the co-Baltic states looking for old girlfriends Ebenezer knew when he was in the Americium armed forces. There was Fluorine, Ruthenium, Irhenium, and a few great Scandium blondes. They wanted to dine on stuffed boron and fried rice garnished with erbium from Indium, very tantalum. But young Ebenezer would rather work on his formula for a new fuel than have a social life. As he saw his former friends feasting, flirting, and fooling around, as only the sili-con, it occurred to Ebenezer that being a mean old chemistry professor wasn't the greatest occupation in the world.

Later, just as his dreams were getting mildly pleasant again, another ghost, who looked a bit like St. Nickel-us, came to wake Ebenezer. "Not again," said Ebenezer, "If you don't go away, I'll call a copper!" His attempts to thallium were in vain. The second spirit took him to Rub Cratchet's hubble, where poor Tiny Tin was crippled, with his leg thorium, and no way to helium. Though he smiled with Christmas cheer, he was sulfuring with a protractinium sickness, and zincing into greater argony.

At three o'clock the most prephosphorus apparition of all (the gaunt form of Alan Cranston, no doubt) appeared and carried Ebenezer out to view all sorts of ugly things which might come to pass. First, he saw Moly B. Denum, Beryl Lium, and Van Adium, those scavenging scions of the subculture, coming out of the unscrupulous undertaking firm, Cesium and Barium. Van was carrying Ebenezer's chromium candelabra, and his prized red magic marker was stuffed in Moly's skirt pocket. The mysterious spirit then took Ebenezer to view his own fate, shining a ra-don onto a krypt-on which a familiar name was inscribed.

"E-gad-olinium! What a cad-mi-am!" declared Ebenezer, who wasn't much of an English scholar, either. And with that, he awoke a new and nobelium man. He put on a radium smile and swore to Xenon never to give a crippling chemistry exam to Tiny Tin or anyone else ever again. Lithium and with a manganese heart, Ebenezer sprang from bed, ran to the window, and caught snowflakes on his tungsten. He took out a neo-dymium, and called the doctor to go over and look at Tiny Tin's leg and curium. Tin was tellurium with joy, and said, "God bless us, everyone, even mean old chemistry professors!"