### Fun with Alchemy -or-How I Learned to Stop Worrying and Love the Grey-goo -or-Thumbtack: A Cautionary Tale By Randy Lubin

The high pitched pings of hammers pierce your dreams and the scream of a buzz -saw ends any hope of a good night's rest. You abhor Anderson Omnicorp, Construction Division. It was not as bad when they were just working on weekdays but this overtime/weekend nonsense is *way* too intrusive. You roll over and check the clock: 7:15AM. If not for the noise, you could easily get a few more hours of rest- any attempt now would be futile. You lie on your back wishing you could strangle someone responsible for the cacophony (Anderson's CEO, the site manager, the customers who just *had* to have the completion date moved up three months... anyone). You quickly conjure up the image of your hands around an anonymous victim's neck, their eyes bulging out to three times their normal size and then popping, as if in a cartoon. This makes you smile and you are ready to get out of bed.

Do you step out with your left foot or your right foot? If left, go to Section A, if right, Section B.

### Section A

"Yeeeoww!" you scream as your left foot presses down on a thumbtack that you neglected to put away. You stare at your sole: a little blood, but not too much. "Have I had a tetanus shot recently," you ponder, "Yeah, when I snagged my arm on that nail at The Pub & and Brewery last fall- almost worth it for all the free drinks they gave me." You hop to the bathroom, throw on some Neosporin, apply a Band-Aid and hobble out to the kitchen. Your roommate Bob is there and he shoots you a what-stupid/klutzy-mistake-have-you-madenow? look. You have no patience for his condescension, even if you deserve it. You give him a classic don't-want-to-talk-about-it headshake, accented with a roll of your eyes, before grabbing your keys, throwing on your sandals, and walking out the door.

Pain shoots up your foot as it makes contact with each of the 35 steps down but by the time you reach the bottom, you are effectively blocking out the pain. You exit through the lobby and emerge into the heavy August air. The humidity envelopes you and you immediately regret not changing from longpajamas into shorts; oh well, no way you're walking all the way back upstairs. You decided to get away from the racket of the construction site, which is now drowning out all noise but a passing ambulance. Burt's Deli is just a couple blocks away and it is definitely air-conditioned; you hurry off, ignoring your aching foot and limping only slightly.

As you approach the deli, you anticipate the sensation of iced-coffee running down your throat and a chill radiating from your stomach, the perfect counter for today's heat. You reach the entrance a moment before a middleaged man in a grey suit, who is approaching from the opposite direction. He

looks immensely unhappy, but you would probably be too if you had to wear a suit on a hot Saturday morning.

Do you hurry inside (Section C) or politely hold the door for the man to enter (Section D)?

#### Section B

You walk over to your stereo and turn on some music, hoping to drown out the construction noises. Some choice Iggy Pop wakes you up more fully and you begin to think about the day ahead. You have lunch plans with your friend Jess but know there is probably a 50% chance of her flaking on you. Maybe you will eat a quick breakfast here and then walk around the park before it gets too hot outside. You take a quick shower and then head to the kitchen.

Bob, your roommate, is already there and is working his way through a box of cereal. He responded to your roommate ad on Craig's List and though you probably wouldn't hang out with him otherwise, he makes a decent roommate. He keeps weird hours and smells a bit but, apart from periodic diatribes about his boss, he generally leaves you alone. He graduated from MIT a few years ago with a Masters in Nanotechnology and has since been working in a research lab, downtown (coincidentally owned by Anderson Omnicorp, via a holding company). He is wearing the same clothes as the day before and you suspect that he had worked through the night and only recently returned to the apartment. He has bags under his eyes and he is propping his head up with his hand. Despite looking exhausted, he launches into an energetic tirade about

his work. About a tenth of what he says makes any sense to you; you ask him to slow down and speak in plain English. You immediately regret it, expecting his layman's version to be just as boring and only the slightest bit more comprehensible.

Bob proceeds to inform you of how he had just made a major breakthrough. He had been trying to harness nanotechnology to transform ordinary tin atoms into gold, a modern attempt at alchemy. After months of work and myriad dead-ends, he has finally succeeded. He then goes on to explain how no one else at the lab knew how close he was and speculates that he could sneak the technology out of the lab without anyone realizing. He asks you if you would help him set up a mini-lab in the apartment and start producing gold. You immediately realize how unethical this would be but are tempted by the amount of wealth you could create.

Do you aid Bob in stealing the equipment (Section E) or do you stand by your morals (Section F)?

### Section C

You barge in past the man and rush up to the counter. Lights go off and confetti drops- you are their 100,000th customer. The owner, Burt, walks out from behind the counter to congratulate you. He announces that you have won a lifetime of free meals here; you thank him profusely. You smile at your reversal of fortune; you've never had such a miserable day turn so wonderful. After a cursory glance at the menu, you order your first free meal: an egg and bacon sandwich on a croissant. It is delicious and you eat it with gusto.

About halfway through the sandwich you bite into something hard. Upon closer inspection, it appears to be a human index finger. Your eyes grow wide and the blood drains from your face. You proceed to vomit for the next five-toten minutes, all over the table, window, and floor. Several patrons run out of the building. Once you have recovered and washed yourself off, the man in the grey suit approaches you. He introduces himself as Murray; he is a prominent litigator and offers to help you sue Burt and his suppliers. After many months of negotiation, Murray secures you a 17 million dollar settlement. With more money than you know what to do with and few ambitions, your first decision is to move out of your apartment.

Do you move to your own private island in the Caribbean (Section G) or buy a penthouse in the city (Section H)?

### Section D

You hold the door open in a grab for some good karma. The man brushes by without any acknowledgement of your gesture. When he gets to the counter, lights go off and confetti falls, he is their 100,000<sup>th</sup> customer. Burt comes out and tells the man that he has won a lifetime supply of free meals. You are livid; you should have received that prize. Further, there is no one behind the counter to serve you your iced-coffee.

You storm out of the deli, furious with the world. You haven't had a worse day in a long time. A swift kick to a nearby garbage can reminds you of your foot wound from earlier and you grimace in pain. You take a deep breath and notice a Starbucks across the street; at least you can still get your coffee. Halfway across the street you are hit by a speeding Vespa Scooter. It is hot pink and you die instantly when your skull cracks open on the asphalt.

#### THE END

### Section E

You decide to help Bob, envisioning the fortune you can amass with his invention. Over the course of the weekend, the two of you develop a plan for how you will steal the equipment. You and Bob sneak into his building one night, later that week. You successfully reach his lab and begin packing up his equipment. The work goes slowly but finally you have everything you need, loaded on dollies. You begin making your way toward the exit when you run into the building's sole security guard and he immediately calls the police. Charges are pressed and before you know it, the trial is over. An unsympathetic judge (and niece of Anderson Omnicorp's COO) finds you guilty of burglary, corporate espionage, and conspiracy, then sentences you to eightto-ten years in a maximum security prison. You try for an appeal but your court-appointed lawyer fills the form out incorrectly, leaving you no option but to go to jail.

### *Read Section I and then proceed to Section L*

## Section F

You resist the temptation of easy money and say no to Bob. Bob is unhappy with your decision but decides to go ahead with his plan, anyway. He enlists the help of several of his coworkers and they manage to steal the equipment and set it up properly. Within a week they are transforming small quantities of tin to gold. By the end of the month they are producing significant quantities of gold, you receive none of it. You are very envious. Bob moves out, forcing you to pay the full rent until you can find another roommate.

You decide to capitalize on the situation. You ask your friend Jess, a commodities trader, to take significant short positions on the price of gold. Soon after, you leak news of Bob's invention to the press and anonymously upload schematics to the internet. As the market is flooded with converted tin, the price of gold quickly plummets. You and Jess make millions off your short positions and Bob is indicted on counts of burglary and grand larceny. With more money than you know what to do with and few ambitions, your first decision is to move out of your apartment.

Do you move to your own private island in the Caribbean (Section G) or buy a penthouse in the city (Section H)?

# Section G

Island life suits you well. You spend your days tanning on the beach and swimming in the lagoon. Most nights you relax by the fireplace and read. Occasionally, you will fly your friends in to visit but for the most part, your existence is solitary. This is fine by you, a much needed a break from the chaos of city life. After a few years, your only connection with the outside world is through Raul, a fisherman from the mainland who brings you supplies every other week. One day, Raul brings a stack of newspapers with him baring horrific news.

Read Section I and then proceed to Section J

### Section H:

You decide to purchase a penthouse apartment in a skyscraper downtown; life is good. Through savvy investing, you turn your millions into several billion. You become a well-known philanthropist and give millions away to charity. At first this is just for the tax write-offs, but over time you grow to enjoy giving back to the community (it also may have something to do with all the fancy galas you get to attend). You are highly respected and the media loves you. After several years pass, your butler runs in with disturbing news.

*Read Section I and then proceed to Section K* 

### Section I: Four Years Later

Nanotech Gone Awry: Global Extinction Assured; Science Accident or NanoTerrorism; Contact Lost with Europe... News programs and blogs foretell the demise of humanity. The "grey-goo" is spreading quickly, though apparently it is neither grey nor gooey. It is a mass of self-replicating robots, each smaller than a virus or a strand of DNA. They have only one function- to assemble duplicates of themselves by using any resources available. They have been expanding at exponential rates, eating up everything and everyone in their path. Experts are certain that they are unstoppable.

Neo-luddites had warned of such a calamity but scientists tended to shrug off their fears and overestimate the competency of safeguards. There will be a last minute effort to build a second swarm of nanoparticles that will combat the grey-goo, but the work will not be completed in time.

Though word never reaches the public, the origin of the grey-goo lies with Anderson Omnicorp. One enterprising junior executive in the coffeemaker divison had heard about the work being done in Bob's labs and saw an opportunity to make a name for himself within the organization. He led an effort, within, his branch to harness the nanotechnology to make hyper-efficient coffee filters. Somewhere along the way, everything went terribly wrong. When it became clear that his machinations would lead to the end of the world, Anderson Omnicorp elected to quietly fire him; he left with a mediocre

severance package, something he would grumble about for the rest of his life (about two weeks).

### Section J

While the world is consumed by its own panic (and the grey-goo), you remain calm. You aptly recognize that you cannot alter the situation, that freaking-out would be a waste of energy. The isolated location of your island will allow you to live a little longer than people on the mainland but you know that it is only a matter of time before a bit of nanotech debris washes ashore.

You spend your remaining days as you always have, swimming and tanning during the day and reading at night, though perhaps you savor it a bit more. Several weeks after you first heard of the grey-goo, a chunk finds its way to your Island. Within minutes, it transforms the entire island and you as well. You are at peace with a Zen-like stare on your face as the grey-goo consume you, but it's much more likely that you are writhing in agony.

#### THE END

# Section K

You stand in shock for several minutes, absorbing the news. While this catastrophe has caused most people to panic, you remain calm. You aptly recognize that you cannot alter the situation, that freaking-out would be a waste of energy. You spend the few days you have left working hard to ensure that food and water is available to the city's residents, despite the breakdown of most commerce and transportation. When the wave of grey-goo finally washes over the city, you die content, knowing that you have lived a meaningful life.

### THE END

## Section L

Your years in jail have not been easy but you remain blissfully unaware of the chaos occurring around the world; the warden never informs you of the tragedy unfolding. One day you wake up and all of the guards are gone. Still locked in your cell you yell out to the other inmates, searching for any information. No one knows anything. Later that night the grey-goo overcomes the prison. You are broken down to the atomic level and then reconstructed as millions of self-replicating robots. Don't worry though, the whole process took less than ten seconds and was mostly painless.

### THE END