

## TECHNOLOGY 30

After dinner, Landon decided to continue writing books on all the knowledge he acquired from: his past life as an engineer and from the system rewards.

Ever since he finished the farming mission a while ago, he had been writing daily on : Farming, Basic Chemistry and Mathematics.

He had been using the systems time capsule, for 3 hours a day in the real world (\*\* 15 days in the time capsule) alongside a concentration speed pill.

1 concentration speed pill allowed him to concentrate and write super fast for 1 hour in the real world.

After taking the pill, he realized that in 2 hours (10 capsule days), he had written 5 books. Landon was pleased with the pill.

So far, he had written 32 copies of basic chemistry, 25 copies of introduction to farming, 39 copies of Basic Mathematics and 3,000 timetable parchment papers for each student.

Today, after his morning teaching session, he decided to continue making more copies. His goal was to have: 60 copies of basic Chemistry, 50 copies of introduction to farming and 60 copies of basic Mathematics by Friday.

Once all the copies were done, he would allocate them to schools and all industrial departments in Baynard.

He also decided to continue writing and re-adjusting the laws in Baynard, as well as the military rules for soldiers.

Baynard was sort of a ruleless city. Since the empire stopped caring about the place, the nobles who lived here before, just did what they wanted and also took what they wanted.

'They were just bullies'. Landon thought.

And just like that, Landon's week flew by fast.

He spent his days: writing, teaching, assisting in farming, building mud houses, fishing, training and building gigantic furnaces for different departments in the construction industry.

Occasionally, he would also visit the mines and the alchemy laboratory, to see how they were doing.

By the time it was Friday, he had accomplished all his goals.

Out of the total copies he had, he kept 30 Basic Chemistry books, 30 Basic Mathematics books, 30 Introduction to farming books and 2000 copies of the timetable in the school storage room.

In Baynard, every student would get 2 parchment paper timetables for free.....But if the student loses them, he/she would have to buy one from the school or shops in the central region. 2 of them would cost 1 copper coin.

As for the rest of the books, he decided to distribute them to all supervisors and overseers within all the industries in Baynard.

On Friday, Tim came back with a large wagon filled with pickaxes. They were unloaded and neatly arranged in a tool storage facility for the workers.

Thinking about it now, Landon thought it would be a good idea to build a locker room where everyone could keep their tools in it. Of course building it, would be the duty of department 4, when they start working.

Landon gave 10 copies of basic Chemistry, 10 copies of basic Mathematics and 300 Timetable sheets to the construction industry.

Since all the supervisors already know how to read and write, as well as do math, he decided to give them the copies. Be it the alchemists or even Tim's group of people. All of them knew how to read

Hence, each supervisor was to keep 1 copy and read and fully understand them.

In the future, although these courses will still be taught in school, if the employee doesn't understand something at work, it is the duty of the supervisor to explain it to him/her.

Back on earth, supervisors and overseers knew the how's, the what's and the why's.....Why they kept the temperature low in some procedures, why the pressure was high, the dangers of doing certain things, and so on.

Engineering itself is a very risky field. Some compounds and chemicals, can only be kept or worked on, at certain pressures and temperatures.

Higher pressure's, could cause explosions in the tank, killing everyone instantly. After all 95% of chemicals are flammable at specific entropies, pressure's and so on.

Hence, in Landon's mind, the supervisors and overseers must be knowledgeable enough to explain and assist the workers. They must act and guide all those under them.

He also gave 10 copies of basic Chemistry, 10 copies of basic Mathematics and 300 copies of the Timetable to the Qlchemy Industry.

As well as, 4 copies of basic Chemistry, 8 copies of introduction to farming, 4 copies of basic Mathematics and 300 copies of the timetable to the Food Industry.

His reason for giving the food industry Chemistry and Mathematics books, was simple.

Very soon, Baynard would start processing canned tomatoes, tuna and many more. As well process their own spices and food preservatives.

To make all this happen, chemistry plays a major part in it, talk less of Mathematics.

Once the night came, Landon jumped onto his bed and closed his eyes immediately.

-----zzzzzzzzzz' --- finally, the little king was fast asleep.

Again, the days flew by fast, and just like that, Monday was here.

'Let's make some glass' Landon thought.

Gunpowder was a delicate thing.

To make it, one needed saltpeter, charcoal and PURE sulphur. The purer the sulphur, the stronger the explosive effect of the gunpowder.

So far, there was saltpeter and charcoal available, but pure sulphur was a different matter on it's own.

Pyrite rocks (called the fool's gold) is formed when Iron ore and sulphur, fuse together naturally with time. Since Iron is silvery and sulphur is yellowish, the rock is a blend between the two colors and can easily be spotted in the mines. Hence the name fool's gold.

Most Pyrite rocks have 53% sulphur, in them.

If Landon just threw these pyrite rocks in with the charcoal and saltpeter, the gunpowder it would produce would be trash.

He needed at least 97% of pure sulphur, for it to be extremely powerful. Hence extraction was the only way.

Landon could have used the clay pot method to extract the sulphur but that method was unsafe and not practical for industrial use.

Generally, when Sulphur is being extracted, a very poisonous and toxic gas called H<sub>2</sub>S is released.

When using the clay pot method, there is no real safe way to dispose of the H<sub>2</sub>S, making the workers breath the poisonous gas.

Large amounts of H<sub>2</sub>S can instantly damage your health, but small batches will not cause a lot of harm. That's why people only use this clay pot methods in small batches (5 to 6 stones) a time.

Landon didnt want to risk the health of his workers health, so the clay pot method was off the table.

How could he let them breath in poisonous gases? The workers would be producing gunpowder for god know how long. At leafy it should be safe.

Hence, he decided to build his own apparatus using Iron and glass. He wanted to create a safe way to dispel the H<sub>2</sub>S gas, as well as carry out an industrial scale batches (150-300 stones).

If he was going to build something, why not make it industrial scale? What's the point of throwing 5 or 6 rocks there, when you could throw 100's?

It didn't make anything sense for Landon, who had hired more than 100 workers to just through a few stones a day. He wanted a mass production of sulphur, not a tiny sample.

'Go big or go home', he thought.

He also decided to build it in a way that was easy to manually control for now.....But when electricity would come...hehehe.....he would attach temperature sensors, pressure sensors and other devices to a control room.

'Ahhhh...the future is so bright..... I cant wait to build a food processing plant.... oh wait!!....I miss toothpaste maybe a...no no no...I'll do an industrial paint making plant first.' Landon thought while drowning in his futuristic fantasies.

Little did he know, that dangerous forces where gathering in the shadows.Waiting to make their move.