



# Non-fiction

Group 1

# Gunpowder Power

*Carmel Elementary School, Shapiro, Charlie – 6*

I chose to write about gunpowder because I am interested in space rockets and I want to become an astronaut. I learned when researching about gunpowder that rockets evolved from simple gunpowder, and wanted to learn more. I also like studying Mandarin and learning about China.

Gunpowder was invented in the 9th Century by Chinese monks who were looking for a recipe for something that people could drink or eat in order to live longer or even to live forever. But instead of discovering a formula for helping people to live longer, the monks discovered gunpowder which had the opposite effect. It is very interesting that they actually invented something that was used to hurt or kill people instead of helping people to live longer.

I learned in my research that the use of gunpowder was first developed as a weapon by the Chinese military during the Song dynasty. The Song dynasty soldiers used gunpowder in explosive weapons such as fire arrows, bombs and even a kind of flamethrower! Gunpowder was such a military advantage for the Song military that they tried to keep it a secret from their enemies. The Song dynasty government even banned the sale of saltpeter to foreigners to try to stop China's military enemies from using gunpowder, but the technology was spread by the Mongols who used it to conquer other parts of the world.

People mostly know gunpowder is used in guns, but it is also used in other things like fireworks and mining. It is very interesting to me that gunpowder is used for something deadly (like guns) and can be destructive (such as explosives when used in mining), but also to make beautiful fireworks.

What other uses are there for gunpowder and are there some uses that have not been invented yet? The history of gunpowder should encourage people to keep inventing things because you never know what will be made out of it.

# Jaozi – The First Paper Money

*Carmel Elementary School, Turner, Adi – 8*

Before paper money existed, people used items such as rocks and seashells to trade for houses and horses. The earliest currency was born in ancient Mesopotamia 5000 years ago, and since then, currencies have evolved from commodity money to metallic coinage and paper money. Nowadays, digitized currencies run the global economy, partaking in billions of transactions every minute. However, the history of money is far more complex.

The foundation for the development of paper money was laid by two inventions: the paper and ink technologies, both of which are part of the ‘big 4’ Chinese historical inventions. The paper was invented during the Han dynasty around 100 BCE. Beforehand, materials such as bamboo strips, silk, and animal skin were used as surfaces for writing, but they were relatively expensive, not accessible, and not reliable. The ink technology was developed more or less simultaneously with the paper. The traditional ink, mostly known as ‘carbon ink,’ was made by grinding inkstick (a mixture of soot from burned pine wood and glue) on an inkstone with water. These two innovative technologies allowed the invention of the first paper money, the ‘Jiaozi,’ and opened the door to a new era of global trade.

Jiaozi was the first paper note born in the Northern Song Dynasty in Chengdu, the Sichuan district capital of China, and it was first issued on April 1st, 1024. Before the Jiaozi, the traders had to use expensive metal coinage that suffered a few significant disadvantages. Firstly, the metal coins were hefty, and therefore difficult to carry around, resulting in divisibility and inefficiency issues. Moreover, they were easy to counterfeit and fast to wear and tear. The Jiaozi was revolutionary, solving all of the prominent issues of the metal coinage system. The portability of money increased due to the paper bills being lightweight and easy to carry. Durability also improved with the outstanding quality of the Chinese paper, due to the evolving paper technology. Divisibility stopped being an issue, and counterfeiting became much more difficult.

The impact of the Jiaozi was enormous, not only on the Chinese economy but on the whole world. Local and foreign traders distributed this new form of money all over the world, allowing improvements in financial intermediation, enabling merchants to conduct business more efficiently, and encouraging economic growth. Today, Jiaozi is displayed in the Chinese Finance Museum of Chengdu. It is an incredible milestone in global finance and is the first of many paper notes developed and printed over the years, which still serve as a crucial part of our daily lives.

The Chinese invention of Jiaozi is an excellent example of using leading technologies to invent a “game changer” in globalization. By improving trade efficiency, this Chinese revolutionary invention helped to make the world smaller, better, and more united than ever.

# New Tales of China's Inventions

*ESF Beacon Hill School, Wu, Ava – 7*

Do you have an idol? Well, my dad does. That was a famous statesman, strategist, and engineer that I know in ancient China called Zhu Ge Liang. He was born in the year 181 and died in the year 234. He lived in the Three-Kingdoms period which was quite chaotic, and invented a lot of things like Mantou, landmines, Kongming Lantern, and repeating crossbows.

To my surprise, some inventions are still in use, for example, Kongming Lanterns. Although the others are not, outdated inventions give us ideas to upgrade them into newer and better ones.

One of his best inventions is the wooden ox and flowing horse (or Mu Niu Liu Ma in Chinese), which he created at 49 years old. He made it because his country went to war and the army was carrying heavy rice on the move. After he made a wooden ox and flowing horse, the army could just put the rice in its body which was actually an empty container so that the self-walking carrier could save people's energy!

Almost a month ago my dad bought a toy of the wooden ox and flowing horse for my brother and me. It was a pack of pieces, and we had to connect the body and the legs with bolts and nuts. Amazingly this hand-made animal walks with the right front leg and the left back leg stepping out at the same time, and so are the other two legs moving – It worked perfectly! It is of a baby puppy's size and my lower arm's length. All parts including its head and horns are wooden so it is light brown. As long as you softly pull the long rope in its nose, it starts to walk easily, unlike a box container.

It has no facial expression but I can still imagine that it is a happy ox, or a curious one.

Nowadays, people replace it with bags, wheel suitcases, and even newer driverless cars. In case you don't know, a driverless car can drive by itself when you are seated inside. You don't have to worry if it bumps into other cars because there are a lot of sensors all around it. There is also a map navigator inside the car so that it knows where to go as soon as we type in the destination. Unlike Mu Niu Liu Ma, there is a supercomputer inside the car that functions like the brain of a human. It can understand and respond to all the information from many sensors at the same time. I'm excited not only because it is cool but also because it can help people. Even blind people can have their cars in the future. And I don't need a driver's license anymore.

Recently when my family took a plane to South Korea for a skiing holiday, my uncle gave me a ride on his new Tesla. I was really surprised when I saw his hands off the steering wheel but the car did not bump into anything. The steering wheel was slowly and slightly turning by itself as if someone I couldn't see was steering it instead of my uncle. Sitting in the car, my family felt they were on the road to the future.

I feel curious about what Zhu Ge Liang would invent if he were here, but I'm sure that he would at least be as inspired as I am now by so many new inventions in the modern world.

# What Do You Think?

*German Swiss International School, Luan, Xavier – 7*

## **Chapter 1: Introduction**

Many kids want to be a scientist to calculate and to make their own inventions. I would think you will become one when you grow up. But I guess your inventions might be like a train, bottle or boat. I would like to invent something like a robot friend or magical medicine. Oh, and one more fun fact! Did you know that the wires we use for electronic devices, like the ones that connect your computer or TV, were inspired by Star Wars?

After Many centuries, China might even invent a machine that can help your parents with chores. If I'm wrong with what you might invent, what would you invent? Even if you don't want to be a scientist, it's okay too. Not being a scientist, you can also invent! You can use your imagination and create amazing things with paper, toys, or anything you can think of. And who knows, maybe one day you'll come up with an invention that changes the world!

## **Chapter 2: Old inventions**

China has invented many things including paper making, moveable type printing, gunpowder, compass, mechanical clock, silk, umbrella, alcohol, acupuncture, tea production, iron smelting, porcelain, earthquake detector, racket, bronze, kite, seed drill, raw crop farming, toothbrush and paper money, and much more!

## **Chapter 3: Future Inventions**

Now that we've learned about all the amazing things that China has invented, let's dive into the exciting world of future inventions! There are so many cool ideas and possibilities waiting for us. Are you ready?

**Flying Cars:** Imagine zooming through the sky in a car! In the future, we might have cars that can fly. How awesome would it be to soar above the clouds and go on adventures in the air?

**Talking Animals:** Wouldn't it be amazing if we could talk to animals and understand what they're saying? In the future, we might have devices that can translate animal language, so we can have conversations with our furry and feathery friends.

**Magic Food Machines:** Hungry? In the future, we might have machines that can instantly make any food you want. Imagine pressing a button and getting a delicious pizza or a yummy ice cream cone. It would be like having a magical kitchen!

## **Chapter 4: Dream big**

Isn't it exciting to think about all the incredible inventions that might be waiting for us in the future? Remember, you don't have to be a scientist to invent things. So, keep dreaming, keep imagining, and always believe in the power of your ideas. The future is full of possibilities, and you can be a part of making it even more amazing. Have fun exploring and inventing, my friend!

## **New Tales of China's Inventions**

*Hong Kong Baptist University Affiliated School Wong Kam Fai Secondary and Primary School, Lau, Ho Yeung Avery – 9*

The Invention of Gunpowder in China Gunpowder is one of the four greatest inventions of ancient China, alongside the compass, papermaking, and printing. This impactful innovation was developed by Chinese alchemists in the 9th century. Its accidental discovery shaped the course of human history. In this report we are going to talk about the origins and impacts of this powerful invention. In China, gunpowder is referred to as huoyao, translating to "flaming medicine".

Unlike papermaking and printing, the discovery of gunpowder was serendipitous. Alchemists, in their quest to concoct an elixir of immortality, stumbled upon a mixture of sulfur, saltpeter, and charcoal that produced explosive reactions. This new substance was initially used for creating fireworks to celebrate festivals and other significant events.

By the end of the Tang Dynasty, gunpowder began to see military applications. The Song and Yuan Dynasties' frequent wars accelerated the development of cannons and fire-arrows, launched from bamboo tubes. By the 12th and 13th centuries, gunpowder technology had spread to Arab countries, Greece, and other European regions, eventually reaching every corner of the globe. This invention profoundly influenced Chinese civilization and had farreaching global impacts.

The effects of gunpowder invention can be observed from ancient times to the present day. Gunpowder revolutionized warfare. It led to the creation of powerful new weapons such as cannons, muskets, and other firearms. Consequently, military strategies evolved, and the effectiveness of castles and fortresses diminished. Gunpowder technology spread from China to the rest of the world via trade routes like the Silk Road, fostering cultural exchange and economic growth. The production and trade of gunpowder and firearms became pivotal industries, stimulating global economies. In contemporary times, gunpowder's impact is still significant, but its applications have diversified. Modern firearms and explosives, rooted in gunpowder technology, have reshaped the conduct of wars and influenced military strategies.

The widespread use of guns has affected the outcomes of conflicts and shaped the world's political landscape. Apart from warfare, gunpowder is used in several essential areas. It's employed in mining, construction, and the creation of fireworks and special effects. Controlled explosions using gunpowder aid in mining operations and building demolitions, while adding excitement to celebrations and cultural events.

While gunpowder has many uses, the availability and misuse of firearms pose significant challenges. It's crucial to establish regulations and laws to ensure public safety. Debates surrounding gun ownership rights and preventing illegal trade constitute a global issue. Gunpowder's influence on the world throughout history is significant. It has revolutionized warfare, shaped technology, and impacted global trade. Today, it continues to influence military strategies, contribute to various industries, and raise safety concerns.

As the saying goes, "Knowledge is like gunpowder; it can be used to build or destroy, depending on how it is wielded." Understanding the history and current impact of gunpowder helps appreciate its importance and the dialogues surrounding its use in our modern world.

## China's Future Inventions

*Kowloon Tong School (Primary Section), Chan, Justin – 10*

Do you know the four great inventions of China? They are papermaking, printing, gunpowder and compass.

The first invention is papermaking. During the Han dynasty, paper was made of plants, fishing nets and old pieces of cloth. Later, they were used as toilet paper, teabags as well as paper currency. The second invention is printing. It was first done by using wood. People carved Chinese characters on wood. The third one is gunpowder, which was used for fireworks for celebration. In battles, gunpowder was used as bombs and explosions. Now, gunpowder is also used in firearms. The last is the compass. Originally called Sinan, it used the sun, moon, and the stars to determine directions. Later, people began using a needle, with one end pointing north and the other pointing south to tell directions.

Nowadays people use apps such as Wechat, Alipay or even electric cars. One future invention will be robots which can communicate with us. They will act like humans, write poems, use mobile phones, play on computer tablets, read books, drink water and play sports. They also look like us having nails and teeth.

The second future invention will be flying electric cars. They will have the ability to expand or shrink, and we can give them directions to go to specific locations or destinations. The flying electric cars do not require manual driving and can take us to our destinations. They can also travel underwater.

The four great inventions of China have been passed down and improved over the years with technological advancement. In the foreseeable future, there is no doubt that human-like robots and flying electric cars will be possible inventions as well.

# New Tales of China's Inventions

*Kowloon Tong School (Primary Section), Chung, Cheuk Hin – 9*

One day, I woke up with a strange robot beside my bed, it was very small. It had small cute eyes. It had a speaker that could talk to you. It had a flat body. It also had six wheels that automatically drove by itself, so you didn't need to carry.

It actually all started like this. Yesterday night a scientist sneaked into everybody's houses and put a robot in everyone's bedroom. The scientist said "Giving robots to everyone will make their lives very convenient, now when people go out to do something, most of them will bring their intelligent robots out. For example: We don't need cashiers now, since the robots can help us count how much we need, then we can put our credit cards on the robot for just two seconds, then the robots will just use WI-FI to send the money to the company.

You can also use the robot to remind you and tell you what you need to bring things, after the robot reminds you and tells you what you need to bring for the day, you can open the back of the robot and put your small things in it. But, in case something doesn't fit in there, you can use the special gear to clip your bigger things on it. It also has a lock. You must enter your passcode to open the back of your robot, and nobody will even know what your passcode is, because it is your fingerprint! If you ask your robot where you could go, if you want to go to a place, the robot can automatically tell you what to do.

The best thing is, this robot is very Eco-friendly, because it uses a solar powered battery, so when the weather is sunny or hot, it is very suitable for taking your robot outside!

It also has a water-sucking function. If there is very bad weather today, and even your house is flooding, you can activate the water-sucking mode just by pulling out two tiny pipes from the robot. If the robot detects just 0.1% of water, it'll suck it.

It's A.I. (Artificial Intelligence) so it can literally detect how you feel, if you feel bored, it'll play with you, if you feel sad, it'll tell you away to feel better, if you feel angry, it'll tell you ways to calm down. Doesn't that make you feel better?

At last, it knows how to come back to your house automatically, so you can tell it to do something outside while you rest or play.

Would you want a smart robot? I would love to have one!



# A “FAB” Invention

*Kowloon Tong School (Primary Section), Law, Siu Wai – 10*

Our world is in danger. We need to protect it. The world population has reached 80 billion by the end of 2023. Most of us are using cars every day. Traditional cars produce exhaust gas which pollutes the air. Air pollution causes a lot of harmful effects on human beings, such as dizziness, fatigue and chronic respiratory diseases. So we should try our best to keep the world clean.

In China, we have 1.4 billion people and 426 million cars, air pollution is also a key problem to solve. Luckily, many people in China have a habit of using bicycles when they go out. In 2023, there are about 200 million bicycles in China. Moreover, more and more people started using new energy cars like electric cars. But these are not enough!

A new device is going to be invented to help solve air pollution. It is called “FAB” (Fresh Air Bike). FAB is a bike which can make air freshener on the road. On the bike, there is a small filter which is fuelled by the resistance of the bike (kinetic energy) and energy from the solar panels. When you are riding the FAB on the road, the wheels will produce energy for the filter. Then the filter will take the polluted air on the road in and change it into fresh air. The filter will keep working all the way. When more and more people use FAB, the air will be fresher, with less pollution and then, fewer illnesses.

The FAB filter uses clean energy: kinetic energy and solar energy. Clean energy does not cause pollution and harmful effects on nature. The material of the filter is all from recycled cans and plastic.

In addition, we can do exercise when we are riding on FAB. Everybody knows, riding a bike is good aerobic exercise. Aerobic exercise brings oxygen to our bodies, which can keep our bodies fit and healthy. When more people are healthier, they will have fewer illnesses. In this case, there will be less burden on national medical service. Therefore, we can spend the money on other sectors like housing, social welfare and education. Then everybody will be happier!

If the air is fresher, more plants will grow and more oxygen will be produced. Oxygen is very important for all the lives on Earth because we all need oxygen to survive. To save the Earth, we should develop FAB as soon as possible. I hope that we can have FAB, and a more beautiful and healthy Earth very soon.

# My Health Buddy – The Smart AI Health Friend

*Kowloon Tong School (Primary Section), Yau, Ka Man – 9*

In the big world of super cool things like smart robots, super-fast trains, and apps like WeChat and Alipay in China, something really awesome is coming – our new friend, the AI Health Friend!

Imagine having a friend who's like a superhero with a super-smart brain, knowing a lot about keeping us healthy and always ready to help with our questions. What makes this friend extra cool is that it's connected to apps like WeChat. It's just like chatting with friends on WeChat – we can talk to our health friend there and learn cool things about our heart and sleep, like a detective always watching out for our health.

This AI Health Friend is also a buddy who helps us stay healthy, like a coach. It mixes the power of smart tech and super-fast trains. It learns about our bodies, our health history, and how we live. With all this special info, it gives us advice through WeChat that's just right for us. It tells us about the foods that are good for our bodies, reminds us to take medicine, and even finds possible health problems before they become big issues – just like having a super-smart doctor always with us. It sends us friendly reminders on WeChat all the time.

When we visit the doctor and need to pay for it, it's super easy! We can use Alipay, which is like magic money on our phones. All these super cool technologies together make our health experiences easier, more special, and really fast. It's all about making sure we stay happy and healthy with the help of our awesome AI Health Friend!

## Robotic Chair

*Maryknoll Convent School (Primary Section), Lee, Zoe – 6*

This Robotic Chair is made by Zoe.

Zoe is a Hong Kong Scientist in the future. She likes to do a lot of things, like playing with friends, skateboarding and swimming. She enjoys inventing something that is not available now. She also likes to make something from recycled materials.

The invention that Zoe makes can help and make people's life easier, especially for the disabled, and those people that work very hard.

This Robotic Chair has many functions such as move, talk, sing, massage and transform. It is very smart, as smart as a computer.

When you are busy but hungry, it will feed you.

It can even help the disabled to walk and do many household chores. It can clean the windows with its lazer beam eyes.

This Robotic Chair can change into a telescope. You can use it to see anything in the space. It can be your companion to share secrets. You can also put the trash into the head to recycle into whatever you want, but if you make it angry, it will be invisible till the next day.

Actually, it can do more than you can imagine. Do you want to have one?

# Embracing Modern Innovations: A Journey of Gratitude and Inspiration

*St. Joseph's Primary School, Chan, Ho Shing Brandon – 8*

On a rainy September day, I rushed to catch the bus with my mom, eager to head back home. As we approached the bus, an old woman was struggling to count her coins. She just caused a delay in boarding. My mom urged me to assist her with my Octopus card, while she used her smartphone to pay for our fares. With a swift beep, the payment was completed smoothly, and the old lady expressed her gratitude for our help.

I wondered why people still rely on coins for payment when we have such convenient methods available. I took the opportunity to introduce the old lady to the wonders of QR code payment, she eagerly learned the new way within that short 10-minute trip. It warmed my heart to share my knowledge and help her adapt to modern technology.

As I dream of becoming a scientist when I grow up, I find joy in educating others about new technologies. Apart from e-payment, I seek to share some remarkable inventions from China that have significantly improved our lives.

China now stands at the forefront of modern innovation and technology. The country continues to amaze the world with its groundbreaking inventions, such as online shopping, e-payment, high-speed trains, and shared vehicles, which have modernized our shopping, travel, and payment experiences. Let's dive in!

Have you ever left your wallet at home? With e-payment, we can pay by using their smartphones. A simple scan or tap allows for transactions. There is no need to carry cash or deal with dirty coins. Who wouldn't appreciate the convenience of e-payment?

Online shopping, another fantastic invention from China, has transformed the way we shop. With just a few steps on our phones, we can order anything and have it delivered to our doorsteps. It's like having a magical store where everything is at our fingertips! I will never forget my dad ordered me a tailor-made Spider-Man birthday cake on the internet. That's an amazing Spider-man cake!

China's renowned high-speed trains have redefined long-distance travel. These trains can reach incredible speeds, making journeys swift and enjoyable. I took the high-speed train many times for family trips. Traveling at speeds of up to 300km per hour, these trains offer comfort and contribute to the reduction of air pollution.

The fourth remarkable invention for me to share is shared vehicles. It enables people to rent cars and bikes for short trips. It also promotes eco-friendly lifestyle and relieves the traffic congestion. My dad can also save a lot of time to find the parking lots.

These incredible inventions have made my life more efficient and convenient. They have inspired me to think the new inventions I could contribute in the future. Perhaps I'll invent something that will positively impact people's lives, just like these amazing innovations from China!

Let's express gratitude for these inventions and remain open to new ideas. Together, we can create a more innovative and promising future!

## Hua Tuo the Inventor

*St. Joseph's Primary School, Chow, John-Henry – 7*

A Chinese governor had some sashimi. Not long after, he developed an illness. The governor suffered chest stuffiness and had lost his appetite. He then sought help from a physician. The physician had the governor drink two pints of decoction. Later the governor vomited up three pints of parasites.

Once upon a time, there was a wise Chinese physician named Hua Tuo. He was a master of acupuncture and surgery, and he had a special talent for making his patients feel better. Hua Tuo was also very creative, and he loved to invent new things that could help people.

One day, Hua Tuo was walking in the forest when he saw a group of monkeys playing. He noticed that they were very agile and flexible, and he wondered if he could use their movements to help people who were sick. So he invented a new kind of exercise called the “frolics of the five animals.” It involved imitating the movements of a tiger, deer, bear, monkey, and bird, and it was a lot of fun to do. People who did the frolics of the five animals felt more energetic and healthy.

Hua Tuo was also interested in anaesthesia, which is a way of making people feel less pain during surgery. He discovered that a mixture of hemp and wine could be used to make patients fall asleep, and he called it “mafeisan.” This was a great invention because it made surgery less painful and more successful.

Another invention of Hua Tuo was the “anaesthetic ball.” This was a ball filled with mafeisan that patients could inhale to fall asleep. It was a very simple and effective way to administer anaesthesia.

Hua Tuo's inventions were very important because they helped people feel better and live longer. He was a great physician and a great inventor, and his legacy lives on today.

# Face Recognition

*St. Joseph's Primary School, Hon, Hei Ching Horace – 8*

Face Recognition is a popular technology. It provides a secure way to unlock devices and protect our information. Face Recognition has transformed the way and interact with our life.

At first, I think it is convenient because Face Recognition provides an easy way to unlock electronic products and even make payments. So that users just look at the devices and it can scan their face. Secondly, it's more convenient for elderly than using fingerprint. It creates detail map so as to uniqueness.

When I use Face Recognition, something bad happened on me. It makes me feel upset.

So here are three things that I think is bad.

If someone's face has a big change, it cannot be recognized. Also, Face Recognition is easily to be hacked or replaced by a simply photo, so it is not high secure enough.

Lack of privacy, family members or best friends may use relatives to unlock and access personal information.

Face Recognition is wholly dependence on the internet data. If there is no internet, the only personal device to be accessed, other functions will be limited and useless. And also, some poor people cannot have this kind of devices because devices are too expensive.

China has improved the face recognition technology to capture face by a 3D camera in order to enhance accuracy. For example, one of the largest restaurant chain KFC, have been combined 3D camera and liveness detection, "Smile to Pay" can prevent others to use photos as source. Nowadays, Smile to Pay is widely used in China, not only restaurants but public transport and physical stores as a new digital-payment method in 300 cities.

Lastly, I think Face Recognition can do better especially to have more security management on the database. It is really convenient, high technology so as to improve the way of life. Face Recognition has changed to a better and nicer life. At the end, I am very happy to share my opinions, hopefully it's useful to you all.

# China's Legendary Duos

*St. Joseph's Primary School, Hui, Yiu Lang Ethan – 7*

Two inventions that China may create in the future are flying cars and frost guns.

I believe China can create flying cars because China is already a pioneer in manufacturing electric cars. Flying cars can support fast transportation because there should be less traffic jam in the sky. Flying cars can fly up and down to avoid clashing other cars. There will neither be buildings nor people blocking their routes. With the different colours of flying cars in the sky, it will look like candies flying around!

The second invention that China may invent in the future is frost guns. Frost guns can solve global warming because frost guns can make snow and ice in a short time. This is particularly useful for polar bears and Arctic foxes suffering from global warming. Frost guns could be a revolution for the world too as they could build an ice barrier quickly in dangerous situations preventing people from falling off! When the ice from frost guns are melted, it could also become freshwater so people in Africa or the homeless can quench their thirst like a self-defence "weapon".

However, if flying cars and frost guns are used wrongly, they could make a deadly combination for war purposes or become national disasters affecting the climate of the world. I believe China will set rules to control the use of their new legendary inventions.

## **New Tales of China's Inventions**

*St. Margaret's Coeducational English Secondary And Primary School,*

*Chow, Ching Wang Jasper – 7*

The toothbrush was invented in China over thousands of years ago! It was made of bone sticks, rope and animal fur. It was invented in the Tang Dynasty in 6000 BC and it was called the Chew stick at that time!

The Chew stick had two sides. One end was a toothpick and the other was for brushing teeth. It had kept evolving and the Indians called it Chew Wood because every morning, they had chew one end of it. We now have electronic toothbrush.

The toothbrush is a hygienic item. It can be used to brush teeth to prevent cavities happening. Before the Tang Dynasty, people would get a lot of cavities. When you eat, food bits stick to your teeth if you don't brush and germs will drill through tooth and a black circle will appear.

Today's electronic toothbrushes are faster, cleaner and they are easy to use. It is important that we brush our teeth every day to have healthy teeth!

## **New Tales of China's Inventions**

*St. Margaret's Coeducational English Secondary And Primary School, Lee, Man Chun – 7*

Gunpowder is one of the four great ancient China invention. Gunpowder can use to produce fireworks, rockets, cannons, bomb and mines. It is useful and helpful to build up the society. Among all products produced by gunpowder, I like fireworks the most. We can watch the fireworks during New year and other celebrations. Therefore, I am impressed by the inventor of gunpowder and fireworks in ancient China.

Gunpowder was first invented in the late Tang Dynasty in ancient China. Some Chinese Monks discovered the chemical formula of gunpowder when they are holding the life extending ceremony. Later in the Han Dynasty, an alchemist Wei Bo Xing wrote about a substance with gunpowder-like properties and pushed the development of gunpowder with other alchemists with experiments. Although original purpose for the alchemist to do experiments was to explore the immortality of life, they accidentally contributed in the development if gunpowder technology. The Technology of gunpowder was then transmitted to other countries such as Europe and Middle East and the technology was helped to produce weapons, such as fire arrows, bombs and fire lance and ever produce gun in the 13th century. These weapons are powerful in wars.

Despite the military purpose, gunpowder can be used in entertainment – Fireworks, which is usually seen during New Year celebration, it is one of the great invention with the help of gunpowder. Fireworks was invented by Chinese Monk Li tan in the medieval China. He was a fire cracker and he accidentally created fireworks when he tossing the bamboo into the fire, so that fireworks appear.

Although Fireworks appear long time ago, it has limited colour and shape; I hope firework come in different colors and patterns, long lasting time to make more people can see it.

# The Magic Door

*St. Paul's Co-educational College Primary School, So, Suet Ying – 8*

Have you heard about the fantastic inventions from the ancient China? Chinese inventors invented things like paper and gunpower. They were super creative! Now, I have an idea for a magic door that can bring you to different places around the world in just one second. Let's explore this cool invention together!

Do you want to know how to make it? If you do, I will teach you. First, get some wood. Then, use a hammer to put the wood together. After that, attach a button to one part of the wood. Now, put some pictures of different places into the door. Press the button and choose a picture that you want to go there. Finally, open the door to adventures like a secret path through the place you want to visit.

Let's talk about the magic door's amazing powers. First, picture the door getting big, so ambulances and fire trucks can rush through for emergency. It is like a superhero door! If there's a big problem, the magic door can help heroes like doctors and firefighters get to people who need help fast. This is important during things like earthquakes or when the roads are really busy.

The second thing it can do is taking people on trips wherever they want. Since many people in China travel from their hometowns to work in cities, they can use the door to return to hometowns to visit their friends and relatives shortly. Then, they will not feel sad about missing home. During the Chinese New Year, families get together, but some family members are separated from Hong Kong and China and it takes time to travel for a reunion. Fortunately, they can use the magic door to visit grandparents and the elderly in China.

The third thing is traveling around the world in a flash. Usually, we have to take a plane and it can take hours or even days. Some people cannot fly because they are scared of heights or air crashes. Now, the magic door can help them to visit famous places like the Great Wall and the Forbidden City quickly and safely. It can even take people to places that are hard to reach by plane, like the polar regions.

Lastly, people can taste fresh food from all over the world. Fresh food is good for us, but it can spoil during long delivery times. With the magic door, we can get fresh food right away from farmers and fishermen and enjoy tasty and healthy dishes. Imagine you love strawberries, but they don't grow where you live. No problem! The magic door can bring fresh strawberries from a farm far away, and you can enjoy them whenever you want.

With the magic door, we can imagine a future where help arrives fast in emergency, families reconnect easily, everyone get a taste of the world's wonders, and we can have fresh food and become healthy. Step through the door, and let's have adventures together!

# The Amazing Dialect Learner

*St. Paul's Co-educational College Primary School, Tam, Hoi Kin Pascal – 8*

China is a vast country and has many places to travel. There are also various kinds of languages and dialects such as Cantonese and Hokkien. Travelers might be confused when they explore different provinces. Some local Chinese youngsters cannot even communicate with their grandparents effectively. Many people might find it hard to learn because they do not have enough exposure to the language and culture of Chinese dialects. Some would feel shy to practice with their friends. But what if you can learn freely, and without the worry of others laughing at you? And, it's even at the tip of your fingers! We try to solve this problem by creating "The Amazing Dialect Learner". The feature of this app is for people to learn more languages by having a lesson with either a virtual teacher or a real teacher. It's up to you! There are also mini games to play. The goal is to help people pronounce the dialects correctly and connect people closer together.

First, you can choose the class size in the app. There will be private class or group class to choose from. Next, you can pick a virtual teacher or a real teacher. Each lesson is interactive which includes games. Users can store and revise all the lessons they have learned on the app anytime. You may unlock a special feature when you pass level four which is you can connect with other real users who are native speakers of the language you want to learn. You contribute to the community by teaching your mother tongue to other users while learning a new language. Users can make new friends and have a pressure-free environment to communicate with. The user's language skills will improve because of these special features. The Amazing Dialect Learner is designed to change the way Chinese people interact with each other. It can help people learn useful phrases and expressions in that language. Thanks to this technology, the people who didn't share the same language now can communicate effectively. Moreover, learning language is no longer boring with its fully interactive mode and enjoyable games. The learning progress is measurable by record of learning time and game points. Best thing of all, there are plenty of opportunities to practice with real speakers.

In conclusion, language is a door to cultural appreciation, a bridge connecting people, and a ground for respect. When we learn a language, we set off on a journey to understand the traditions and values within it. The Amazing Dialect Learner, by assisting language learning, is not just improving vocabulary; it's showing you a wider understanding of the world and promoting a friendly exchange of ideas and experiences. Hop on and give this app a try!



## The Wonders of Lost Ancient Machinery

*St. Stephen's College Preparatory School, Chiu, Matthew Jonas – 8*

The ancient Chinese believed that events related to earthquakes or other vibrations of the Earth were important signs from Heaven. However, historic inventions were actually the first attempt to explain Earth's movements in a scientific way. The first earthquake detector was invented about 2000 years ago in China. The creator of the first seismograph was Zhang Heng who lived during the Han dynasty (25–220 AD). He was a brilliant astronomer, a mathematician and mechanical engineer. Zhang was famous for many inventions, such as the first water-powered armillary sphere to support astronomical observations; he improved the water clock by adding another tank and invented the world's famous seismoscope, which could predict the direction of an earthquake as far as 500km away. Moreover Zhang was also well known for his poetry which was studied by later Chinese writers. A true intellectual mind!

Out of all of Zhang's inventions, I was really fascinated by the first earthquake detector in history. The first seismograph invented was made of bronze, giant in size and very beautifully designed. Its surface was decorated with details of mountains, tortoises, birds, other animals and some antique writing. Some scientists question the meaning of its beauty – was it made to such detail to look more believable or function better? Perhaps it was a way for Zhang to express his artistic talents along with the brilliance of his engineering mind.

The detector featured eight dragon heads positioned in a circular pattern, each holding a bronze ball in its mouth, and there were eight toads placed under the dragons. The inner parts of the detector were complicated, but the mechanical function was basic; When the Earth shook, the pendulum inside would rock back and forth, causing a ball inside to roll down each of the channels. The ball would then hit a lever which opened one of the dragon's mouths. Then, another ball in the dragon's mouth would drop into the corresponding toad's mouth. Therefore, depending on which toad received the ball, this would indicate which direction the ground's vibrations came from.

The device had its first test in 138 AD when an earthquake was detected west of Luoyang, the capital city where Zhang studied. Very few believed that Zhang's invention worked. But after a few days, a messenger from the west of Luoyang reported that an earthquake had occurred there. This finally made people believe that Zhang's invention was brilliant and very accurate. Some people even called him the "Leonardo of China", naming Zhang after the great Leonardo Da Vinci.

Many types of machinery were invented in ancient China, however, many of them did not survive. Zhang Heng's seismograph was unfortunately one such type of machinery. Even though his invention was lost in time, the records of its mechanics and design survived and many research teams from around the world studied them in hope to recreate this remarkable invention. This made me wonder how Zhang could create something so incredible and so ahead of its time.

# The Creation of Single's Day

*St. Stephen's College Preparatory School, Fong, Kyra – 8*

Every year, at the stroke of midnight on the 11th of November, people rush to their computers, ready to grab the best deals on the internet. Do you know why? In fact, this is a recent Chinese invention!

Another name for the 11th of November is “Singles’ Day”. This is because the four “1”s of the numerically written date (“11.11”) look like 4 lonely people standing together. Singles’ Day was invented back in the 1990s, by four male college students at Nanjing University, who wanted to celebrate the idea of not being in a relationship.

The celebration became more and more popular among young people in China, and they soon treated the day as an anti-Valentine’s Day. Maybe single people were sick and tired of lovey-dovey couples on the street during Valentine’s Day and wanted a celebration for themselves! Singles used this day to organize parties and have fun with other young people.

In 2009, Alibaba, a famous online-shopping platform in China, had the brilliant idea of offering discounts on Singles’ Day. People soon flocked to the website to get the best discounts to treat themselves and celebrate being single.

Afterwards, other international online shopping platforms realized how powerful this day was, and they began offering big discounts on their websites on the 11th of November, too!

Nowadays, the 11th of November is one of the largest shopping events in the world. This shows how powerful new Chinese inventions are. What began as a silly idea among four Chinese college students soon became an international shopping event. Large retailers surely have those four students to thank, especially Alibaba, who earned more than \$71 billion US dollars during Singles’ Day in 2020.

In my opinion, this is a good holiday to remind us to love ourselves for who we are, but we must remember not to let our self-love be determined by materialistic things. Instead, we should focus more on spending time with family and friends and doing things we love.

# An Invention to Protect Our Treasures

*St. Stephen's College Preparatory School, Ng, Yik Fung Oliver Charles – 8*

Can you keep a secret? My home is filled with treasures! Yours too! Have you heard of the Chinese idiom: 「家有一老，如有一寶。」 It means that if you have a senior in your family, you are blessed with a real treasure. I have two great-grandparents on my mum's side. My great-grandmother is 98 years old, and my great-grandfather just turned 102 years old recently. They are precious to me. How can our family treasures be protected?

## **Why was there a need for the invention?**

In an August 2022 publication by the Non-Communicable Disease Branch under the Department of Health of Hong Kong, I read that a “fall was the most common type of unintentional injury, accounting for 39.4% of all injury episodes” that happened within a year. The publication was based on “The Unintentional Injury Survey 2018”. It found that 88.6% of injuries in older adults above 75 were due to a fall. Internationally, the World Health Organization published a “WHO Global Report on Falls Prevention in Older Age” in 2007. The percentages differ between countries, but the fall-accident numbers get bigger as age increases. And more seriously, “falls account for 40% of all injury deaths”.

## **What was invented?**

The muscles of older people are weak, so they can easily lose their balance, fall and injure themselves. Some falls appear because older people might not be able to see properly or they might have chronic diseases. In 2015, a Chinese company designed an airbag vest to protect older adults from falls. The company that designed the vest is called Guangzhou S-AIRBAG Technology Company Limited. Airbags are inflatable cushions found in cars to protect humans from injuries when a car crash happens. S-AIRBAG puts airbags in a vest for older people to wear that protects the hip, head, neck, shoulders, back and tailbone. The Intelligent Vest was born.

## **How does the Intelligent Vest work?**

The Intelligent Vest has two built-in helium inflators. When the vest receives the sensor data that the person is falling, the helium will be released within 0.08 seconds, and the vest will puff up before the person accidentally hits the ground. Older people in many countries, including nursing homes in China, are using it. The design team had started developing new materials and inflation methods five years before the vest was launched. The company has also created a mobile phone application called the “Proprietary App”. The vest can be connected to the application, which sends an alert when a fall occurs. The vest is chargeable with a magnetic USB charging cable, which costs about \$7,800 Hong Kong Dollars. S-AIRBAG has already created an airbag belt that protects older people's hips and pelvis when there is a fall. It costs about \$5,500 Hong Kong Dollars.

## **What will we see in the future?**

In the 2022 Hong Kong publication, injuries from falls in children aged 4 were 66.4%. I wonder if an intelligent vest for young children will be made soon.

# New Tales of China's Inventions

*St. Stephen's College Preparatory School, Yeung, Lok Hei Gemma – 7*

China's inventions have always been fascinating! Let's travel back in time to see what some of the amazing inventions were that still have an immense impact on our lives today. The compass, invented by the Chinese between the 2nd century BC and 1st century AD, was commonly used in Feng Shui for the layout of buildings. By 1000 AD, navigational compasses were also commonly used on Chinese ships, enabling them to navigate. Nowadays, we have compasses in smartphones, making it convenient for activities like hiking or traveling.

Another great invention was the kite, which was developed in China around 1000 BCE. It is very interesting that large kites were used to lift people and as a way for the army to signal warnings. Even though we mainly use kites for leisure now, they are still interesting items that help us navigate wind direction and provide a means to gather with friends.

The invention of paper was commissioned by the Emperor of China to find an inexpensive and portable writing surface. The Chinese government official Ts'ai Lun produced and recorded a technique for the mass manufacture of paper during the Han dynasty. Without the invention of paper, we wouldn't have books to read, paper to draw on, or exam papers to write on. Would there even be libraries?

With the rapid growth of technology in China, let's now take a ride on an imaginary path to unlock a one-of-a-kind future invention. Picture this: a star-shaped, rainbow-colored seed that humans can ingest, and it will magically grow inside the body. After 5 minutes of ingesting the seed, a robot will be developed within your body and reside inside your brain. It will control the body with its built-in GPS, like having a smartphone inside your body, and turn you into an ultra-smart machine. Similar to AI machine learning, the robot can learn about your habits, likes and dislikes, and recommend new activities or hobbies. What makes it even better? It can help you improve your weaknesses and strengthen your strengths. On a daily basis, it will wake you up, remind you of all the tasks you need to do, help you choose the food you need, schedule appointments with people you should meet, and make all decisions for you.

If this seed were an imaginary-come-true, would you be brave enough to take it? Do you want a robot to control you, or do you want to control your own body?

# The Woman who Saved the World

*The French International School, TKO, Kim, Seeun – 8*

Do you know what Malaria is?

Malaria is a type of disease that can be cured now but not in the past.

Malaria is a disease that is spread by mosquitoes. Tu You You saved the world after Malaria spread.

Tu You You was born on December 30th 1930 in Ningbo, China. She was sick with Tuberculosis for 2 years from 16 years old and was forced to stay home. Tuberculosis is a bacteria that makes it hard to breathe.

She could have just lied there doing nothing for 2 years but she did not! She stayed home studying medicine.

After she was cured, she went back to school and she kept studying medicine. Soon in Vietnam, a disease called Malaria spread all over the country. Tu You You joined a group called Project 523. It was a code name for a secret military project in China to find a cure for Malaria in Vietnam. Tu had to spend a few years away from her family to join the military project. She found a plant called Sweet Wormwood which had the power to treat Malaria.

When she came back home after the project, all her work had paid off by saving many people's lives. She was known all over the country. In 2015, she was awarded the Nobel Prize for her amazing cure of Malaria.

Tu You You invented a cure for malaria. Therefore she is one of the most famous Chinese inventors in the past.

# Rosie The Red Robin

*The French International School, TKO, Lee, Lauren – 7*

Have you ever wanted a pet bird that can take you from place to place?

Then let me show you a sweet friend that can take you anywhere!

Did you know people in China used to write letters then tie them to a pigeon's feet to communicate with one another? Rosie the Red Robin from China helps people to go from place to place and do a cleanup for the earth. When you first see Rosie the Red Robin, she is very small but as time goes by, she grows bigger and she can carry a lot of you. Rosie the Red Robin only needs one battery plus when it grows it likes to consume trash. It also likes to breathe in carbon dioxide and breathe out oxygen.

When it grows big enough, you can go inside and take a seat. You can also press the room mode button if you are sitting in the driver's seat and there will be shelter for you with air conditioning. It consumes trash to produce energy and electricity. If you are sitting in one of the passengers' seats, then you can use some control buttons to make the seat comfortable for you. When driving, you can pick whether to go fast or slow.

If it is rainy, I recommend going slowly when driving but if you are stuck in a storm, activate the emergency mode by pressing the weather button. That will help you get out of the storm quickly.

If your friend's bird and your bird are close to each other, you can transfer any amount of fuel to each other. Planes use a lot of fuel, and they emit tons of carbon which is bad for the environment. Rosie, on the other hand, will only emit oxygen. That way, our earth will be very clean and healthy.

You can also travel underwater even if you are riding on the bird, you just have to activate the submarine mode then the bird will transform into a perfect sub. It also can help marine life if you press the ecosystem button.

You can drive on land as well, just activate land mode and there you go. If you are tired of driving just press the auto drive button to have a break and relax.

Did you know every year we dump a massive 2.12 billion tons of waste and there are about 5.25 trillion pieces of plastic estimated in our oceans?

Rosie the Red Robin can help people clear all this trash if we all work together and help the earth because it is our home, the place we live in.

Rosie the Red Robin can also travel through space. You just need to activate the space mode, then you will be able to travel through space. You will discover new planets and find a way to live on them, but the earth is still our home for many years to come.

We cannot wait to see the next Chinese invention!

# China's Most Famous Invention: Chopsticks!

*The Independent Schools Foundation Academy, Cao, Caitlin – 7*

Chopsticks! Chopsticks! Over one and a half billion people eat food with chopsticks every day. In China, people use 80 billion disposable chopsticks every year. Did you know chopsticks were first used for cooking?

Chopsticks were invented 5000 years ago. The first few chopsticks were used for cooking because they were long sticks reaching the bottom of the cooking pots and stirring the mixture. Around 2000 years ago, people in the Han Dynasty started using chopsticks to eat. Rice, dumplings, noodles and stir fry were some of the first foods people ate with chopsticks. Compared to knives and forks, chopsticks were safer to use. During those days, food started to be chopped up into small pieces and chunks before cooking in Chinese cuisine, so chopsticks became a perfect match with such bite-sized food.

The first chopsticks were made from twigs and sticks. Now, they are mostly made out of bamboo, wood and plastic. The wood and bamboo are cut to the length of chopsticks and then milled to the shape. Next, they are sanded smooth in preparation for painting. Finally, they are painted with decorations and waterproofed. Wooden and bamboo chopsticks are mostly only used one time. Plastic and metal chopsticks are mainly used in homes and restaurants but are more slippery and challenging to handle.

Most Chinese children start using training chopsticks when they are four years old. These chopsticks are helpful because they teach children how to pick up food and keep it steady. When kids use chopsticks, they improve their fine motor skills and hand-eye coordination.

When eating in China, people should behave and pay attention to table manners. It is polite to wait for the guest or an elder to put their hand on chopsticks first. Always remember to hold your chopsticks properly by holding them close to the top end and stabilizing the bottom using the middle finger. Then, use the index finger to move them around. Avoid having one in each hand, and never shovel food into your mouth. If you are not using them, put the chopsticks on a rest instead of the table. Using chopsticks as drumsticks and pointing your chopsticks at someone are both considered poor manners.

Chopsticks can be used in many different ways. In the kitchen, you can use chopsticks to skewer meat and vegetables and put them on the grill, beat eggs to make scrambled eggs, test cakes to see if they are baked, and pit cherries and olives. For dessert, you can use chopsticks to make do it yourself popsicles and toast marshmallows over a low flame. Other creative ways to use a chopstick include: poking and unclogging glue bottles, cleaning dirt from small spaces, propping up plants, and so on...

Chopsticks are an important tool in our daily life, not only for food but also for many other uses. Let's use fewer disposable chopsticks to protect the earth and keep good eating habits and table manners to use chopsticks properly.

# AI Squash Robot

*The Independent Schools Foundation Academy, Wang, Youying – 7*

Hello, dear readers! Welcome to the stories by Katherine Wang! Guess what I'm writing about today? It's .....China's next great invention! I will convince Chinese scientists to create an AI squash robot!

First, the mighty AI squash robot I have in mind will develop my custom-made squash, help me do my physical exercises program. Of course, it will know everything about squash, and how to play the game well. It will arrange my squash timetable based on how much time I have and on my body conditions of the day. After collecting the daily data of my body, it will quickly plan my training. Usually, it will categorise my exercises with warm up routines to start the day. Then I will proceed to specific squash skills practices, match simulations and at the very end, exercises for reflexes and fitness. After I have completed all the exercises it will give me recommendations on how to play better! However, there are more wonders!

Playing squash is just like playing tennis, they both require strategy and tactics. I may invest a lot of energy in striking a ball that would eventually prove useless. For example, the ball lands on the middle of the court on my opponent's side, that would favor her in returning a killer shot, which I should not be able to catch after all! To avoid this, my AI squash robot will study and analyze my opponent's play patterns then make recommendations as to how I can combat her. In addition, the robot would do the same with the world's best young players and teach me how to play like them! If I do it often, it will make me more quickly to get used to the style and habits of my opponents, play as smart as the world's best young players, then win the competitions much easier! Though, I believe the AI squash robot can help more!

I love watching squash tournaments in my spare time. My AI squash robot will be the perfect partner to watch the games with me. We will talk about the performance of the world-famous squash players – how they tackle the stress when facing stronger players? How they handle the emotions after the games? I will also share my feelings in the competitions with its robot, seeking its objective view and constructive advises.

All in all, I hope Chinese scientists will invent this AI squash robot. Not only that it will be fun, but I will also be able to improve my squash techniques dramatically! I hold a little dream in the bottom of my heart that one day I would be able to stand in the court of the world-class squash tournament to fight for the Champion for Hong Kong, China. I would be so proud of myself and my trustworthy partner – AI squash Robot on that day!





Creative Writing  
**Non-Fiction**

Group 1

## Robots shape our future

*Kowloon Rhenish School, Cheng, Yan Lam – 8*

The world is changing quickly because we find more new things about the world around us everyday. In the future, we will create super robots that can help us finish a lot of tasks quicker and easier.

Computers can do more and more things and they are becoming more powerful. In the future, I think we will create super robots that can change our lives.

We can use robots in many parts of our lives. They can help us study. Robots are like super computers, we can ask them a lot of questions and they can give you correct answers to all of them. They are also very smart. If you tell them to do something or create something they can also do it.

I believe that in the future, we can see robots everywhere. Robots will become our drivers. They will know to stop before a traffic light or to not crash into other cars. We will not need to learn how to drive because cars will move on their own or robots will drive the cars.

Robots can become our doctors in the future. We can create tiny robots and put them inside our bodies so they can keep us healthy and fight viruses. They can move around our bodies and look after it. We do not need to go to body checks because the robots will check our body everyday to make sure we are healthy, and all of our body parts are normal. The tiny robots can also fight viruses. We will not need to eat medicine or see the doctor anymore.

Robots can help us do dangerous things such as going to space or finding something under the sea. In the future, robots will be as smart as us so the robots in the future can do the same things that we do. People don't need to do these dangerous things on their own anymore. Robots will be smart so they can calculate the ending of different actions and choose the best move. That is why robots will not make mistakes but humans will. I think that robots will do dangerous things better than humans!

Robots can make our lives a lot better but if we do not become smarter, robots will take all our jobs. I think students should read more and try to think more. We should be more creative and not just follow what people tell you to do. We are not robots, we should think is it right or wrong before we do something.

# History of Gunpowder

*Kowloon Rhenish School, Chi, Yik Hang – 8*

Gunpowder is one of the “Four Great Inventions” of China. The earliest China inventor who documented the composition of gunpowder was Wei Boyang. He invented gunpowder, which was so powerful that no one could stop it. Let us talk about the story of gunpowder.

How was gunpowder invented? In the year of 142 AD, Wei was a Taoist alchemist of the Eastern Han Dynasty. When he was helping the King to make eternal life medicine, the pot used in mixing the chemicals exploded and that was how gunpowder was invented by accident.

Later, gunpowder was used in other areas of daily lives after it spread to western countries. One of its usage is building tunnels. In the 18th century, there was a need of moving many people over long distances that trains were invented. But it cannot go over mountains, or a long path needs to be made. People found that the explosive gunpowder can be used to destroy mountains and make railways for the trains much faster.

How gunpowder ended up being used in wars? In the 19th century, war broke out in many countries including China. Armies found that gunpowder can be used to make bombs and weapons. The bombs were really effective against the enemies and they won the war finally using gunpowder. However, many people died in the war because of the explosion caused by bombs. That's how they used gunpowder in the 19th century.

Gunpowder is indeed a great and useful invention for developing a country and industries but it is dangerous and scary.

# New Invention of Paper

*Kowloon Rhenish School, Fung, Tsun Hin – 7*

Paper-making is one of the four great inventions of China. The first true paper-making process was documented in China during the Eastern Han period (25–220 AD). Throughout history, paper has played a crucial role in transforming society due to its impact on the spread of knowledge. Research shows that writing by hand can aid in memory, attention, and understanding new information. In this article, we will explore the future of paper and how it can be used in the fashion and household industries.

As we know, paper's function of record is fade out due to the new technology, "Paper" has to find a new role in future, for example, paper can be used in the fashion and household industries. Paper clothing has already been developed in China, Japan, America, and Europe. In the future, we can have more powerful development on the use of paper, and paper will become important again.

For fashion, we can imagine there is a new product named "Super Clothes" in future. This a cloth made by paper. It can grow with you based on your body growth and change the thickness based on temperatures. When it is summer, it can be thinner and when it is winter it can be thicker. In rainy day, it can be a rain jacket too. So, there is a multifunction in one clothes.

For household, a product called "Freeniture" may appear in near future. It is a paper that can make any furniture like sofa or bed and can change the shape anytime to make a new furniture. It can fold too! This free-style feature can save place, so your house wouldn't very messy and can reuse it many times.

In conclusion, paper has come a long way since its invention in ancient China. It has played a crucial role in transforming society and spreading knowledge. With the use of technology, paper can be used in the fashion and household industries, and even transformed into free-style furniture. The paper industry is keeping its value through innovation. We hope this article can give the World some idea to the future role and value of paper.

# Robot nannies – The future Hope of China

*Kowloon Rhenish School, Ho, Yuet Yi – 8*

Many parents in China do not want to have babies because they are too busy to make a living. They have no time to take care of their kids. So, the birth rate in China is getting lower and lower. In the long run, we will not have enough manpower to make our country better. This is a very difficult problem for the Chinese government.

If we want to boost the birth rate in China, we need someone to help working parents to look after their children. At the same time, AI is getting smarter and smarter. That is why I think there will be robot nannies in a few decades.

These robot nannies have very strong AI to help them understand different kinds of crying sound. When the babies cry because they are hungry, the robot nanny can feed them with their favourite milk or food. The robot nanny also knows how to make the babies happy when they are bored. Also, the robot nanny will pat the babies to help them sleep. When parents want to see their kids, they can make a video call through the robot nanny too!

For older kids, the robot nanny can play with them and help them do revision. When children have questions, they can look for the answers by giving voice commands to the robot nanny. The AI in the robot nanny can get the answers from the Internet easily.

I believe robot nannies will be a dream come true in the near future. By that time, parents will not be afraid of having babies anymore because robot nannies can do most of the child-care work for them!

# Smart Fridge

*Kowloon Rhenish School, Lee, Cheuk Yin – 8*

My family always get a problem: we always miss the expiry date of the food in our fridge and cupboard, and we have to throw them away. It is a big waste and it is not good to the earth. Plus, there are so many people who don't have enough food, and we could help them by giving them food before they get expired.

So, I have an idea to solve this problem. We need a special fridge and a special cupboard that could remind us. It could also help us keep check of what we have, so we don't buy too much food. We can save a lot of food and money if we have them.

The special fridge has been invented by a Chinese company and it is super smart. It scans the intelligence barcodes on the food packages and remind us when they are going to expire. It could even keep check of how much food we have and remind us to eat the food before they expire. That way, we won't buy too much food and waste much food.

If every family has the smart fridge, we can make sure all families do not waste food. It's important for us to take care of our planet. I think this smart fridge could make a big difference!

# Food Waste Car

*Kowloon Rhenish School, Li, Ming Sum – 8*

During this Christmas holiday, my family, my friends and I want to celebrate Christmas together. We went to a restaurant having a buffet dinner. I saw every table had lots of food waste left after the meals. That makes me remembered I had visited an institution handling kitchen waste. The institution explained that many uses of food waste after processing such as making fertilizer, detergent, and more importantly, they can also be used to make electricity.

Nowadays, cars are not only driven by gas and fuel oil, but also electric cars have been invented. I hope China can invent cars driven by food waste. Those cars shall have some containers to put the food waste. The containers are connected to the power supply. There will be three different colours of lights outside the containers. They are white, blue and orange lights. First, put the food waste into the container, press the button. Once it starts, the white light is on. Second, during the chemical reaction, the light turns blue. Finally, when the process is completed, the orange light is on. This means the electricity is made and ready for use. Some containers can put inside the kitchen to collect food waste and produce electricity. Once the electricity is produced, we can put the containers into the car for use.

This invention can minimize food waste throwing in landfill areas and protect the earth. I hope China can invent cars driven by food waste in the very near future.

# One of China's Inventions—Paper

*Kowloon Rhenish School, Yu, Ho Hin Devyn – 8*

Everybody knows China has a rich history of inventions that have had a significant impact on the world. Some of the most well-known inventions from China include paper, printing, gunpowder and the compass. These inventions revolutionized various fields and had a profound influence on the development of human civilization.

I would like to talk about one of the most interesting tales of China's invention is the story of paper. Two thousands years ago, when paper was not invented. People in China used some materials like animals bones, silk, and bamboo strips to record. However, these materials were expensive and not easily available,

1. Oracle bones : Need to take a lone time to carve a sentence.
2. Bamboo strips : It's heavy to lift from a place to place .
3. Silk : Very expensive materials , just can buy only a small amount of lots of money. Always only rich people can afford it.

Therefore, mostly people in China had a big problem when writing.

Cai Lun, a government official in the Han Dynasty. He was inspired by the wasps building their nests using fibres. He observed that the wasps collected fibres from plants and mixed them with their saliva to create a strong and flexible material. This observation sparked his curiosity and led him to experiment with different materials to create a similar substance.

He began his experiments by collecting various plant fibres, including mulberry bark, hemp, old rags and old fishing nets. He realized that these fibres could be beaten into a pulp and mixed with water to form a paste-like substance. This paste could then be poured onto a screen or mesh and spread evenly to create a thin layer. Once the layer was formed, Cai Lun would drain the excess water and press the remaining pulp to remove any remaining moisture. This pressed pulp was then dried, resulting in a solid sheet of paper.

This invention was super cool. Cai Lun's papermaking process revolutioned the way to recorded, transmitted and communication, as it was much more convenient, easier to storage and easier to produce than other writing materials. Also, it was much much cheaper!

The invention of paper had a big impact on the development of Chinese culture and society. Writing became more popular and easier, also printing and packaging. Cai Lun's invention of paper revolutionized the way to record, transmitted, storage. And It played a vey important role in the development of civilization, enable the spread of knowledge, culture and creative as a significant milestone in human history.

Today, most people use computers to replace some paper use, for examples, bills, contracts, receipts...But, paper is still widely used in various industries and remains an essential part of our daily lives. Like painting, paper could not be replaced. Like packaging deliveries, we must need papers to pack...For me, I would like to hold the comics in hands to see than better to see in iPad.

China's invention of paper is just one example of the country's rich history of innovation. There are many other super amazing tales of inventions of China, besides mentioned before that gunpowder, silk, compass, there are abacus, binary, hemp ropes making etc. These inventions have shaped the world we live in today and continue to inspire new innovations and discoveries.

# How Paper Got Started

*Po Leung Kuk Choi Kai Yau School, Bogle, Alexandra Powers – 7*

We use papers in our lives every day, from reading our favorite books, doing homework to even writing letters to Santa. But do you know where paper comes from, and how it got started?

Before there was paper, people used sharp tools to write characters on flat stones, like the Rosetta Stone in Egypt. Stones are very heavy to carry, and they're hard to write on. Egyptians also used to write on papyrus. It is flatter and lighter in weight and easier to write on than stones. But papyrus doesn't last for too many years in humid weather. It can fall apart if it is handled too much.

Ancient China invented paper. During the Eastern Han dynasty, people at the emperor's court discovered how to make what we now call paper. They cut up tree fibers, and other materials like old rags and pounded them together with water into a sticky paste. Then they pressed down the paste under something heavy, to flatten it and make it wider and very thin, in the shape of a piece of paper. They dried the paper, and then it was ready to use.

The ancient Chinese used the paper for writing and for things like wrapping packages and printing money. The Chinese did business with people in many different places in the world, and they took paper with them when they traveled. Soon the new paper was being used by people around the world and continues up to today.

So, thank you to the Han Dynasty Chinese for inventing paper.



# The Seismoscope: One of Life-saving Inventions

*Po Leung Kuk Choi Kai Yau School, Chan, Ching Yuet Bella – 8*

Long, long time ago, there was a Chinese scholar named Zhang Heng. He was talented and diligent from childhood. He was so keen on discovering something which could help people in the world. Driven by his curiosity and perseverance, he really made many great inventions. One of them was the seismoscope.

When he was 17 years old, he left home and pursued his study in Changan and Libyang. Not only could Zhang Heng write excellent essays and draw, he also studied and learned about calendars, mathematics and mechanics. One day, he was heartbroken to see people suffer from many earthquakes across the country. He thought, “It takes a lot of time to convey messages so as to save people from earthquakes. What if we could detect the occurrence of earthquakes earlier, we would be able to reduce the harm and help people in danger!” He was determined to make use of his mathematics and mechanics knowledge. Working endless days and nights, finally he invented a seismoscope. He was delighted and went to show it to the emperor. “Your Majesty, I have an important invention to show you.” “I invented a seismoscope. It detected the location of the earthquake that occurred last night in the northwestern area and you could prepare and transport the supplies to the victims there.” The emperor felt shocked with the big instrument in front of him. In a blink of an eye, a copper ball facing northwest had fallen from one of the eight directional dragons. It implied that another earthquake was coming in the northwest. The emperor was doubtful at first but he trusted Zhang Heng’s integrity and talents. He transported relief and supplies to the stricken areas immediately. Zhang Heng was proven to be right. The next day, a man came in and reported about earthquakes in Luoyang. The early news rescued a lot of victims. The emperor made Zhang Heng a Grand Scribe in the Imperial Court.

The emperor felt so grateful to Zhang Heng’s invention. People could evacuate earlier and escape from the earthquake disaster. With the emperor’s recognition of contribution, Zhang Heng felt motivated to keep inventing something to change the world. He soon afterwards built the first water-powered armillary sphere in the world. He employed a waterwheel and clepsydra to rotate the water-powered armillary sphere. He even invented a wind gauge to help measure the wind directions. Though they are not named as the Four Great Inventions which made us become civilised today, still the technology left by Zhang Heng saved a lot of people from unavoidable earthquakes nowadays. How beautiful it was to invent something for kindness instead of your own fame?

# The Printing Method That Changed the World

*The International School of Macao, Choi, Lonzo – 7*

This morning I asked my parents who invented printing method the earliest? They went and grabbed a book it was called “100 things to know about China”, and my dad started reading “Long time ago, people needed to copy each book by hand, then there was this guy called Bi Sheng...”

Okay, let me tell you about Bi Sheng and his great invention. Now we are in 972AD when he was born, let’s shut our eyes. Are you asleep yet?

Bi Sheng was born from a poor family. When he was a teenager, he started working in a book copying workshop as an apprentice. When he got his first order to copy a book, his handwriting was very nice and neat, but it needed a great deal of work to copy each book. Some people wrote badly, so some books copied very poorly. Because of the labor involved of copying, books were very rare and expensive! As time gone by, woodblock printing was invented. But Bi Sheng saw that woodblock printing also had problems. This is the method:

1. Cut down trees for a woodblock...hard work indeed and not very good for the environment;
2. Each woodblock can only use for one page of a book. So, if a book has 100 pages, each page has 50 Chinese characters, you would need to carve 100 woodblocks with 5000 Chinese characters!
3. Now, roll ink all over the woodblocks and press them onto papers to make book!

Well...you can see, each woodblock is only for a particular book, and you cannot reuse the Chinese characters for another book. Then there was another technique called rubbing print. It is also very hard.

As a clever Chinese young man, Bi Sheng got thinking...there must be a simpler and cheaper way to print books, so he thought more people can learn to read!

After numerous designs, trial and errors. Finally, Bam! In 1041 to 1048 AD, he invented the world first movable type printing! Bi Sheng used clay to carve out individual Chinese letters and bake this small clay stamps hard. Because the clay is much easier for carving, and you can mix and match for different pages, so books became cheaper and wider available!

BOOM! Dad asked now you understand the reason behind why Bi Sheng’s invention is important? I said yes, WOW so in conclusion, thanks to Mr. Bi, knowledge becomes more accessible and the world has changed ever since! This printing method is so important that people nowadays call it one of the four greatest inventions of China, along with the other three: gunpowder, compass and papermaking. Imagine life without his invention, do you want to copy 1000 words a day?

# China's Great Four Inventions

*The International School of Macao, Chen, Kelsie – 8*

Long time ago Chinese people lived in a small village, there's a person called Mǎ Liáng. He is poor and he lives in a small wooden house. Mǎ Liáng's parents passed away for many years. So Mǎ Liáng live by all himself.

He likes to draw but he doesn't have lots of money since Mǎ Liáng parents died so nobody could provide enough money for Mǎ Liáng to buy a pencil or paper. Therefore, sometimes he will get a stick and he will go outside to draw on the sand. One day he finds a hole under his bed. He was very curious so he crawled inside. Magically he found a pencil and a notebook on a wooden table. He took the pencil and notebook from the table. He was very happy and excited about that. He crawled back to his bedroom with the pencil and the notebook. He saw a picture on the back side of the black notebook. But he didn't care about it so he started to draw and draw on the notebook. After he puts the pencil and notebook on the floor, and goes back to bed. But then he wakes up because it's so hot as if his in an oven so Mǎ Liáng went outside and...

He saw ten sun on the night sky. "Ahhhh.....," his shout.

He even saw Nián but he wasn't scared at all because everyone put up fireworks and red stuff on Nián. Nián run away because it is scared of the color red and fireworks. But still there have ten sun, and also all the water evaporated so, some animals has died from thirsty and even some people died as well. Mǎ Liáng sits and think. He thinks and thinks one minute goes two minutes goes three minutes goes, and he thinks hardly then he got a idea Mǎ Liáng jumped out of the tiny bench and started to draw. Ma Liang draws and draw and draws Hòu Yì and Cháng É, then the drawing was gone ! Then... POOF!

Hòu Yì and Cháng É is alive! After Mǎ Liáng tells Hòu Yì about the ten suns.

Hòu Yì told to Mǎ Liáng, "Outside is very dangerous. You have to stay on the beach and don't go outside until I am done killing the suns."

"Okay" I said.

Then Hòu Yì stands up and walks outside to get a bow and the arrows to shoot the suns one by one until those suns all fall down.

Hou Yi wanted to shoot the last sun, but Má Liǎng took the last arrow and said, "Hòu Yì if you shoot the last sun then everywhere is dark how could we live."

"Oh, fine. I will not shoot the last sun, and I need to go back to the notebook and bye bye,"Hou yi said.

Poom!!!!

Hòu Yì and Cháng É disappeared in the wooden house. After Má Liáng used the pencil and the notebook to help the village to return peace. Later on Má Liáng keep using the magic pencil and notebook to help the village and his life.