





## Four Great Inventions

### Four Great Inventions

Category: **Technology & Civilization**

No. of Headword: 1600

Four inventions — gunpowder, the compass, paper, and the printing press — played key roles in human history and development. Learn how each of these was invented and discover how they changed the world.



## Home for the Spring Festival

### Home for the Spring Festival

Category: **Wisdom & Beliefs**

No. of Headword: 1600

Every year, millions of Chinese leave the big cities and return to their hometowns for Chinese New Year - known within China as Spring Festival. Learn why this is China's biggest festival and how it is celebrated.



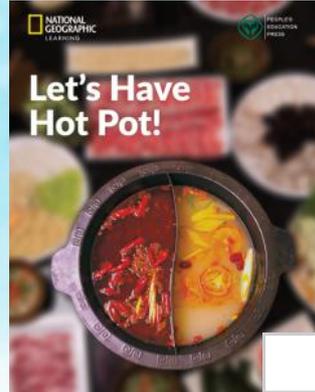
## Legends in the Sky

### Legends in the Sky

Category: **Literature & Art**

No. of Headword: 1600

Every culture has its own stories about how Earth was formed, and about the other planets and stars that can be seen across the night sky. Learn about some of the oldest and most loved Chinese stories, such as the Oxherd and the Weaver Girl, and their impact on modern life.



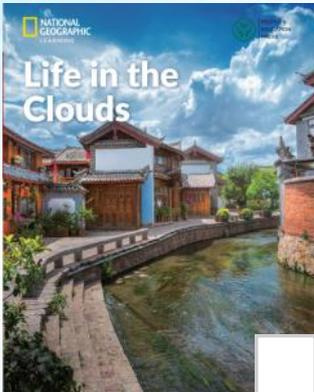
## Let's Have Hot Pot!

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Category: **Folk Customs**

No. of Headword: 1600

While many Chinese don't agree on what food is best, almost everyone loves hot pot. It is so popular people joke that any problem can be solved over hot pot! Learn all about this delicious shared dish and find out why it has a special place in people's hearts.



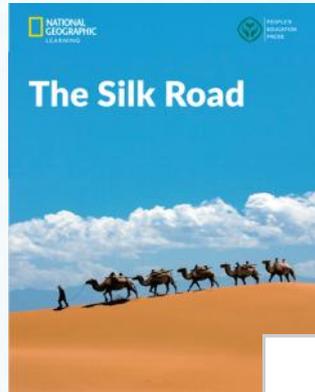
## Life in the Clouds

### Life in the Clouds

Category: **Folk Customs**

No. of Headword: 1600

China is home to 56 different ethnic groups, each with their own special customs. One of the best places to experience some of these local cultures is in the Old Town of Lijiang, a place surrounded by high clouds and mountains. Learn about the Naxi and other groups as you walk the streets of this ancient city.



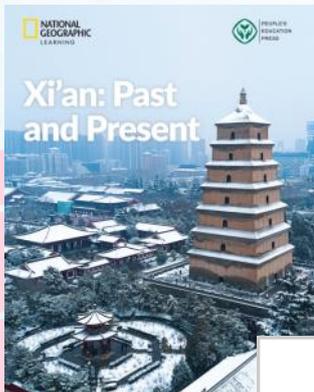
## The Silk Road

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Category: **Technology & Civilization**

No. of Headword: 1600

The Silk Road was a set of ancient trade routes that led from China's ancient capital of Chang'an, all the way to Rome. All kinds of things were carried along these routes; not just goods, but also religion, technology and ideas. Learn how the Silk Road developed and helped to change the world.



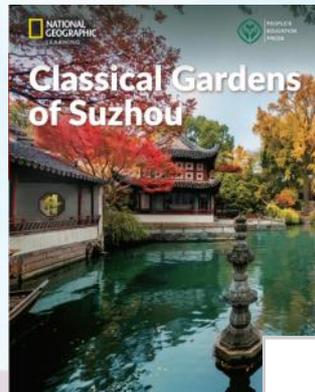
## Xi'an: Past and Present

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Category: **Wisdom & Beliefs**

No. of Headword: 1600

Xi'an is one of China's oldest cities and it has a rich and important history. Today, the wonderful and vibrant city is one of modern China's high-tech centers, drawing from both the present and the past to offer something truly special to locals and visitors.



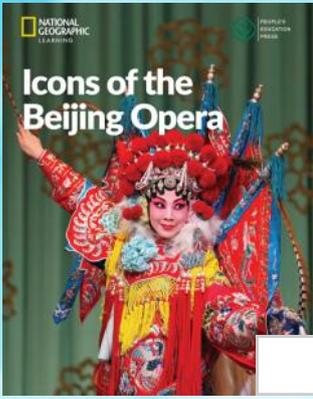
## Classical Gardens of Suzhou

### Classical Gardens of Suzhou

Category: **Folk Customs**

No. of Headword: 2200

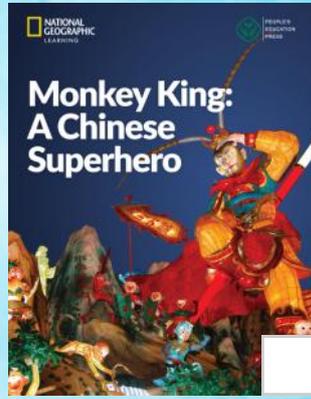
Suzhou — an ancient city located on the south of the Yangtze River — is home to some wonderful classical-style gardens in China. Learn about the most important of these and what makes them great examples of Chinese culture, as well as the idea of creating a natural world within the garden walls to showcase nature's beauty.



## Icons of the Beijing Opera

**Icons of the Beijing Opera**  
Category: **Wisdom & Beliefs**  
No. of Headword: 2200

The Beijing Opera is a prized form of theater in China. It continues to bring to life many ancient stories and heroes that help shape Chinese culture. Learn about some of the most famous opera characters and explore the unique features of this amazing form of cultural entertainment.



## Monkey King: A Chinese Superhero

**Monkey King: A Chinese Superhero**  
Category: **Literature & Art**  
No. of Headword: 2200

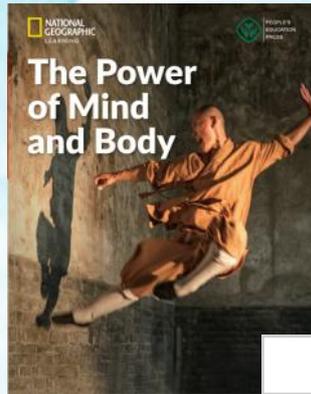
The Monkey King was a powerful Chinese hero who could fly through the air and defeat armies with his magic staff. A character from one of the classics of Chinese literature, *Journey to the West*, the Monkey King has been a superhero to Chinese children for centuries. Find out why he continues to feature in TV shows, movies, music and other entertainment.



## Pandas: China's Ambassadors

**Pandas: China's Ambassadors**  
Category: **Wisdom & Beliefs**  
No. of Headword: 2200

Giant pandas are one of China's most precious national treasures. Learn how pandas became a symbol of China and one of the most popular animals in zoos around the world.



## The Power of Mind and Body

**The Power of Mind and Body**  
Category: **Folk Customs**  
No. of Headword: 2200

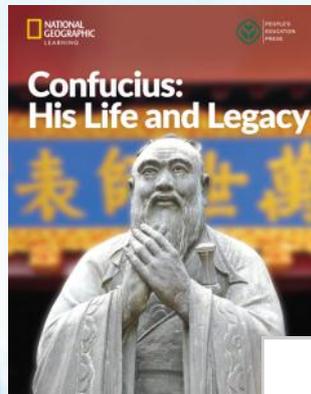
Kung fu is practiced around the world and is one of the most recognized aspects of Chinese culture. Originating many centuries ago, it was developed in part by Buddhists living and studying at the Shaolin Temple. Learn more about this fascinating martial art and explore the life of its most famous star.



## Traditional Chinese Medicine

**Traditional Chinese Medicine**  
Category: **Technology & Civilization**  
No. of Headword: 2200

Traditional Chinese medicine has a history going back thousands of years. It includes medicine made from Chinese herbs as well as various methods for pain relief, health care, and disease prevention. Learn the theories behind traditional Chinese medicine and explore its more recent use within modern medicine.



## Confucius: His Life and Legacy

**Confucius: His Life and Legacy**  
Category: **Wisdom & Beliefs**  
No. of Headword: 3000

Confucius was one of China's greatest philosophers. He had many followers who spread his ideas throughout the country and abroad. Learn about who he was, what he believed, and his influence on modern China.



## Racing to the Future

**Racing to the Future**  
Category: **Technology & Civilization**  
No. of Headword: 3000

China has rapidly become a world leader in high speed rail. Transportation times between many major Chinese cities have been cut: Journeys that took days now take hours. Here, we track the exciting technological developments in high speed rail and consider their cultural impact.



## The Story of Chinese Characters

**The Story of Chinese Characters**  
Category: **Literature & Art**  
No. of Headword: 3000

One of the things that connects Chinese people together is their ancient writing system. Chinese characters are not pictures, but they usually contain several different elements that work together to tell a story, giving the characters their meaning. Learn how this writing system developed, and the history of Chinese writing from the past to the present.

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Imagine a time long before TV and the internet, when books, magazines, and newspapers did not exist. In those days, news traveled mostly by word of mouth, and students learned from their teachers by memorizing what they heard. In time, books were developed, but these were written out by hand, making them quite expensive to make and own. This limited the knowledge in books to the very rich. More people could have access to books if they could be made more cheaply. Printing helped to solve this problem.

Despite what some may believe, printing was not invented by Johannes Gutenberg (1400-1468). In fact, most of the things used in Gutenberg's printing press had been invented much earlier in China.

The idea behind printing is ancient. People realized that they could cut out one or two words on a small sheet of paper and then glue the sheet to a page. However, people in China took this idea to the next stage. What if you cut many words on a large block of wood? This could then be copied hundreds, thousands, or even millions of times. Then, what if the words were cut out on different pieces of wood, so that instead of making a new block of wood every time you wanted to print something, the words could be used over and over again? These ideas were put into practice by the Chinese in their printing technology.

**Fact Check**

1. What are the three ingredients of gunpowder?
2. What was used as a pointer in many of the earliest?
3. What did Europeans generally use to write on before was introduced?

**Track 2**

All these pieces of paper are issued... as if they were of pure gold or silver... and the shan issues every year to make each a vast quantity of this money, which costs him nothing, that is most equal in amount to the treasure in the world.

The Treasures of Marco Polo

With these words, Marco Polo (1254-1324) wrote about one of the most wonderful inventions he had seen in China: paper money. To 15th century Europeans, this was an amazing idea, and it took them a long time to understand it. Today most of the world's money is made up of paper, though payments are often made with plastic cards or by other technologies, and virtual money seems to be the next big thing.

The idea of paper money started in China. For much of Chinese history, what most people thought of as money were small coins with holes in the middle. These coins were put on a piece of string, 100 coins to a bunch. Normally, ten bunches were kept

From the beginning, gunpowder had a variety of uses, including fireworks and guns. The Chinese had developed an early form of gun using gunpowder, but these guns were not very easy, or safe, to use. Given how dangerous guns were, the Chinese ultimately preferred to use gunpowder for a more graceful and beautiful purpose: fireworks.

We so often take for granted yesterday's inventions. For example, today in China the compass is most often thought of as just a cheap toy used by children. However, for centuries the compass was the most important navigational "device" in use. With the compass, people sailed the seas. No longer were we afraid to enter the open water, for now it became great roads to parts unknown.

It is not known exactly when the first compass was created, but it was first described in a book written during the Warring States period (475-221 BCE), and it was called the *sinan*. The *sinan* was usually made of a metal or wooden plate with a small, metal magnet "soon" placed in its middle. This *soon* would then be spun around. When the spin finished spinning, the handle would always point south. A *sinan* would have words written on it which could be used to help with things. For example, the device could be used to tell the best place to build a house, or which direction the handle should be held.



# A Chinese Invention We Use Every Day

**Track 2**

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on the same string, which could be very heavy to carry around. Since even 1,000 coins were not really worth that much, business deals of any importance could require many strings of coins—even whole rooms of them.

To solve this problem, beginning around the late 8th and early 9th centuries (Tang Dynasty), merchants would deposit their coins with someone, and for a receipt that person would give them a piece of paper called *feiqian*, or "flying money." Then when the merchant did business, he could use that paper instead of having to carry a truckload of coins around.

In 822, these departments in the Tang government began using paper receipts for large deals where a lot of coins would normally have to be carried over a long distance. This was not money in the modern sense, as it could only be used to pick up coins at the end of the trip. This finally led to the printing of paper money as we know it today by the early 11th century. Depending upon the era, paper money may have been worth quite a lot or may have been nearly worthless. At times, the government even had to stop using paper money because no one wanted it. However, paper money was simply too convenient to give up on, and so in the end it replaced coins for all but very small business deals.

**Word Count: 412**

**Navigation: the science of finding the correct path for a ship, airplane, etc.**

**Device: a machine or tool**

**Magnetic: of magnets and their forces; magnets are materials that attract or drive away certain other materials because of their electrical charges**

**Spin: to turn something very quickly and easily**

**Track 3**

Navigation: the science of finding the correct path for a ship, airplane, etc.

Device: a machine or tool

Magnetic: of magnets and their forces; magnets are materials that attract or drive away certain other materials because of their electrical charges

Spin: to turn something very quickly and easily

**Word Count: 110**

## Sample pages from Four Great Inventions

A final category of Chinese characters is by far the most common—making up about eighty percent of the characters in use. These are phonetic-semantic characters. With phonetic-semantic characters, one element of each character gives a clue to the pronunciation, while the other gives a clue to the meaning. A good example of this is 羊, which is a literary word meaning "no, not" and which is pronounced [yáng].

Keep in mind that the meanings of many Chinese characters have changed in the past, so the semantic part of a character may be only somewhat related to the meaning. In a similar way, pronunciations including tone variation, as is shown above, have changed too, and so in many cases the phonetic element of a character only gives an idea of how it is pronounced. Of course, there are some characters where there is no longer any relationship between the phonetic element and its modern pronunciation.

Over the centuries, the *hanzi* have continually been developed, with a trend towards the simple and more abstract. This trend quickened in the early 20th century both in China and abroad as literacy became seen as less a luxury, but as a necessity. It was thought that the complexity of some Chinese characters was keeping people from being able to learn them. Thus, during the 1950s and 1960s, the Chinese government rolled out simplified Chinese characters. In many cases, this simplification was a regular change of just one element in a character. For example, when the character 羊 is used in compounds, instead of being written as 羊, it becomes 羊. Thus we have:

Traditional	Simplified	Meaning
说	说	to say
话	话	language

**Match the kinds of *hanzi* to their meaning.**

1. pictograms: a. characters which use elements of two characters
2. ideograms: b. characters whose original meaning has substituted to one to represent another the same pronunciation
3. compound characters: c. drawings of objects used to both its characters and their meaning
4. phonetic loan characters: d. characters which give clues to a writing system and pronunciation
5. phonetic-semantic characters: e. characters used in a writing system to abstract concepts

One of the earliest forms of writing which is still being used today in Chinese characters, or *hanzi* ("han" characters). According to legend, *hanzi* were invented under order from the Yellow Emperor by Cangjie, a man with four eyes who could see everything in the universe. Like many great creative people, Cangjie found a mental block when he first set out to create this new system of writing. However, as he was thinking about the problem, he saw a few lines impressed on the ground—animal tracks. He added a hunter about the tracks, and the hunter realized that by identifying the tracks one could identify the animal. This led to Cangjie's idea of basing the writing system on using a few lines to identify each thing, just as an animal can be identified by the few lines of its tracks.

Within no time at all, he had compiled a list of characters. The Yellow Emperor was so impressed with the system that he ordered all his deputies to learn it. Meanwhile, as the story goes, the evil spirits cried at night, because they knew that with the development of writing they could no longer trick humans, and humans would have the keys to knowledge and growth. The gods, however, celebrated the achievement by raining grain from the skies. Like the Yellow Emperor, Cangjie was probably a mythical person, though there may indeed be a historical figure hiding behind his name. In fact, the story of Cangjie could be myth, but this story of how the *hanzi* were created is also a myth, though there may be a grain of truth in it, in that the *hanzi* were created by people observing the world around them and drawing what they saw.

There are two separate periods in the evolution of Chinese characters. The first was the ancient period, when *hanzi* began to be used for oracle bone inscriptions during the Shang Dynasty (1600-1046 BCE). Oracle bones were used to record historical events and as a form of fortune telling. For this latter usage, a fortune teller would drill some small pits on a tortoise shell or animal bone, and then heat it, until it cracked. The fortune teller would study the cracks and make predictions. This prediction, along with the issue and the result, in many cases would be cut into, or sometimes written on the shell or bone. However, while the purpose of these oracle bones is often given as "fortune telling," these inscriptions were not always fortunes or wish lists, but seem to have served some sort of ritual purpose for the state. The oracle bone characters are the oldest *hanzi* known so far, though this already quite sophisticated writing system indicates an earlier development period. Cut into a bone or shell, they tended to be rather rough and simple pictograms "without many rounded corners. For example, the symbol for "eye" was 目 and the symbol for "child" was 子.

**Track 3**

Oracle bone script

# The Four Treasures of the Study

**Track 2**

In ancient China, a study necessarily meant reading and writing hard, whether it was to take notes, produce essays, create a painting, or to practice calligraphy. In this regard, there were four necessary tools which no student could ever afford to be without, which were called the Four Treasures of the Study.

The first is the inkstick, which is made by mixing soot or charcoal with some sort of paste. Sometimes incense or spices are added as a preservative and to make the inkstick smell nice. This mixture is then pressed into a mold and allowed to dry and become hard. Traditional inksticks are always black.

The inkstick is useless without the second tool, the inkstone. An inkstone can be made of just about any kind of material, including metal, although actual stone is the most popular. The stone should be somewhat flat and small enough to fit comfortably on a desk. Cut into the top of the stone is a smooth, flat inkwell. To use an inkstone, an inkstick is ground

Into the inkwell with water to produce a liquid. The amount of water and ink can be adjusted to produce different shades of gray for ink-wash paintings. Many of these inkstones are highly decorated and considered works of art.

A good brush is the next tool. These often have handles of wood, and nearly always use real animal hair for the brush itself. For calligraphy, the tip of the brush is often cone shaped. This allows the brush to be used both to draw very fine, delicate details, and wide, bold lines, depending upon how much pressure is applied.

The fourth treasure is paper. The most famous paper used for writing *hanzi* is Xuan paper, which is produced in Anhui Province, China, and which has a reputation for being able to last 1,000 years. This paper is loved because it is strong and smooth, and easily holds the ink. While it is not necessary to use Xuan paper for writing *hanzi*, whatever paper is used should be able to absorb the ink without blurring the words, while allowing the calligrapher to write quickly and fluently.

While these Four Treasures of the Study have been replaced by more modern tools for today's students, they are still integral for anyone who seriously wants to improve calligraphy.

**Word Count: 308**

**NATIONAL GEOGRAPHIC**

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Confucius: His Life and Legacy

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## Sample pages from The Story of Chinese Characters

Companion site provides answer keys, audio for both the main and expansion readings.