


# Chinese Inventions

## Learning Objective:

To understand how the four great inventions of China shaped the world.



N  
E  
X  
T



What do you think  
have been the greatest  
inventions EVER?

They can be modern  
inventions or go back to  
ancient civilisations.

BACK

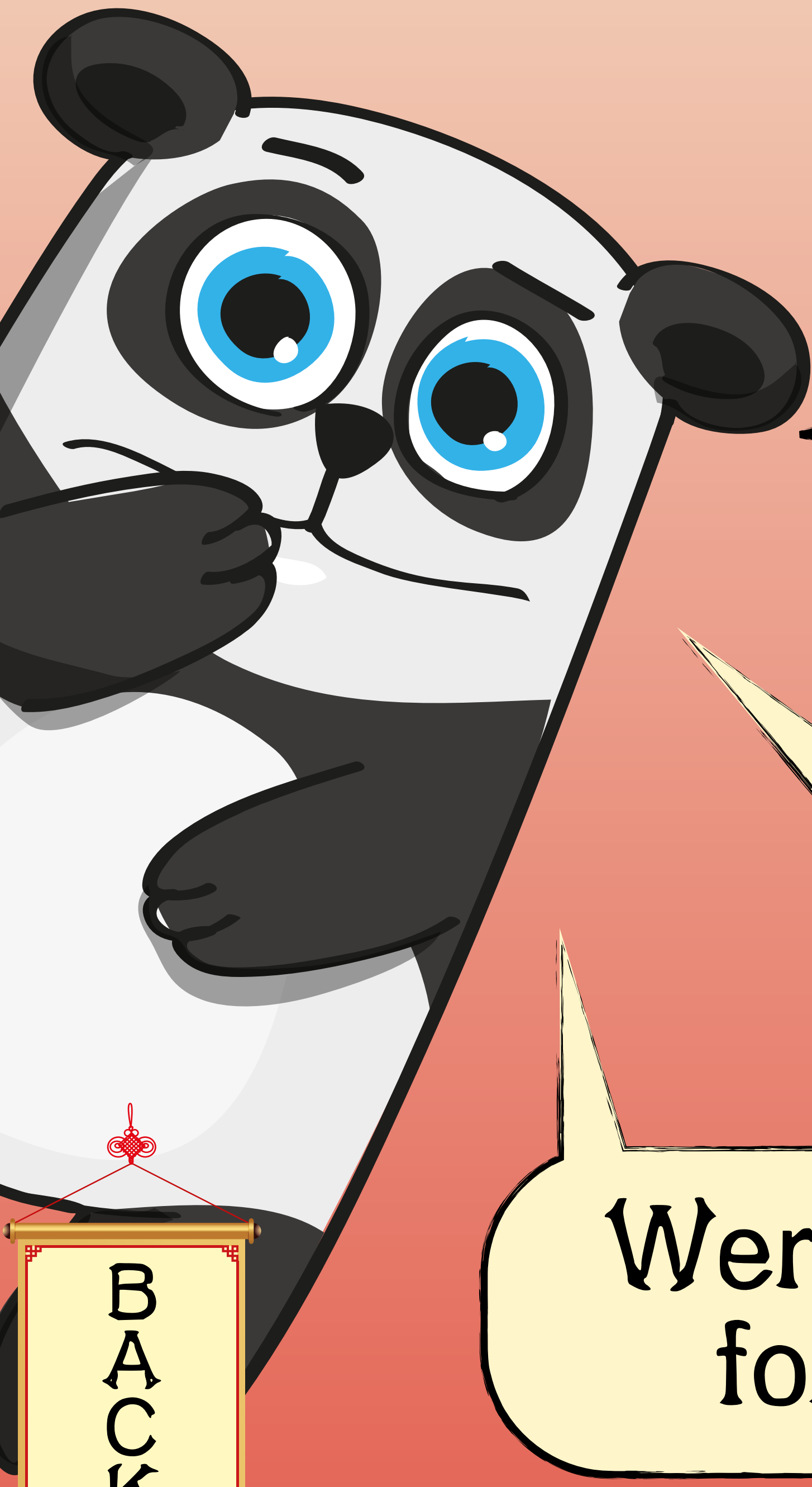
NEXT



# Greatest Inventions

BACK

NEXT



Have another look at the inventions you thought of. Why do you think these are some of the greatest or most important inventions?

Did they lead to big changes in people's lives?

Were they important or useful for everyone in the world?

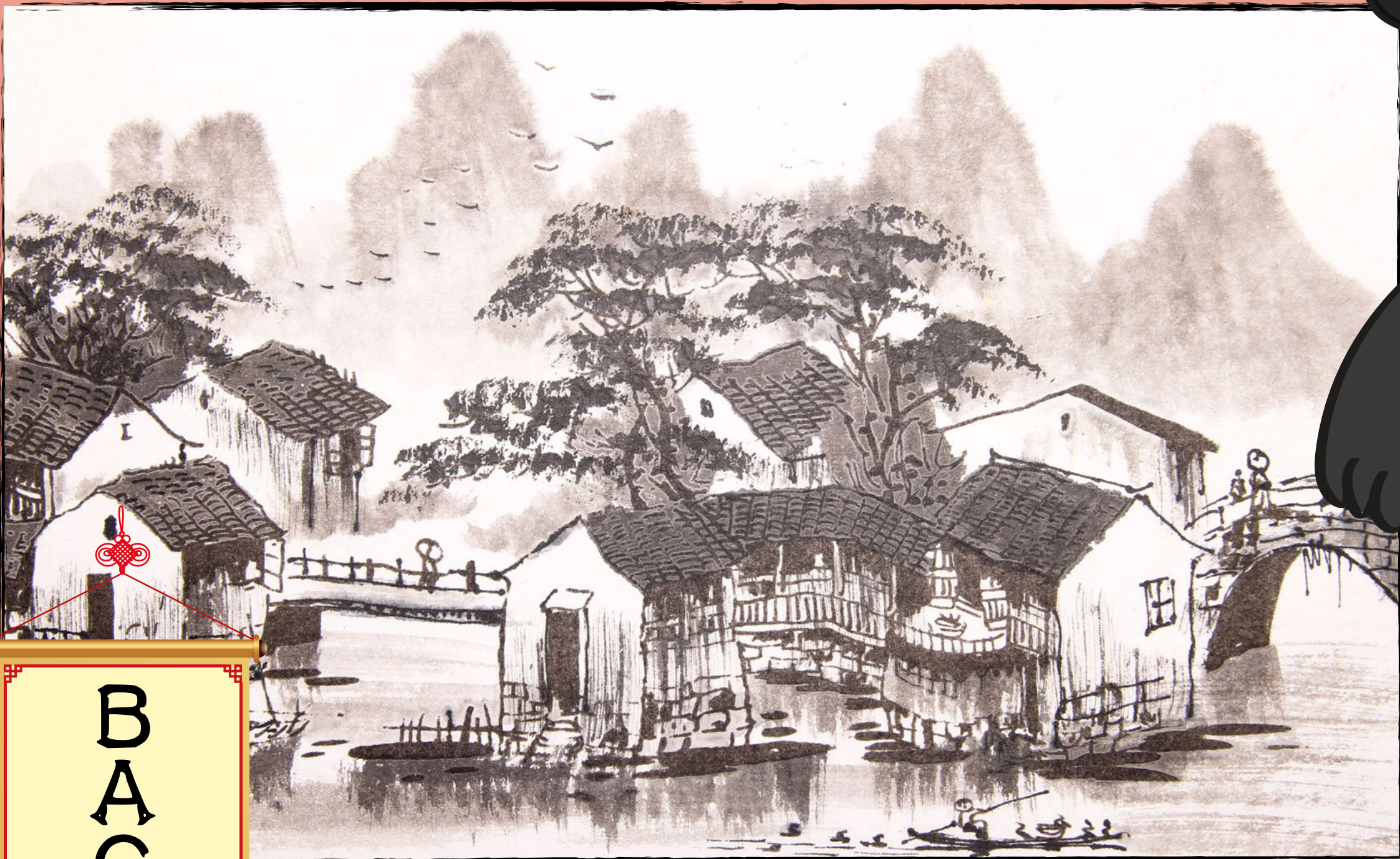
BACK

NEXT

The Chinese have been responsible for many great inventions, recently and dating back to the dynasties of ancient China.

The ancient Chinese are credited with thinking of the four greatest inventions.

Can you think what these inventions might be?



BACK

NEXT

Paper

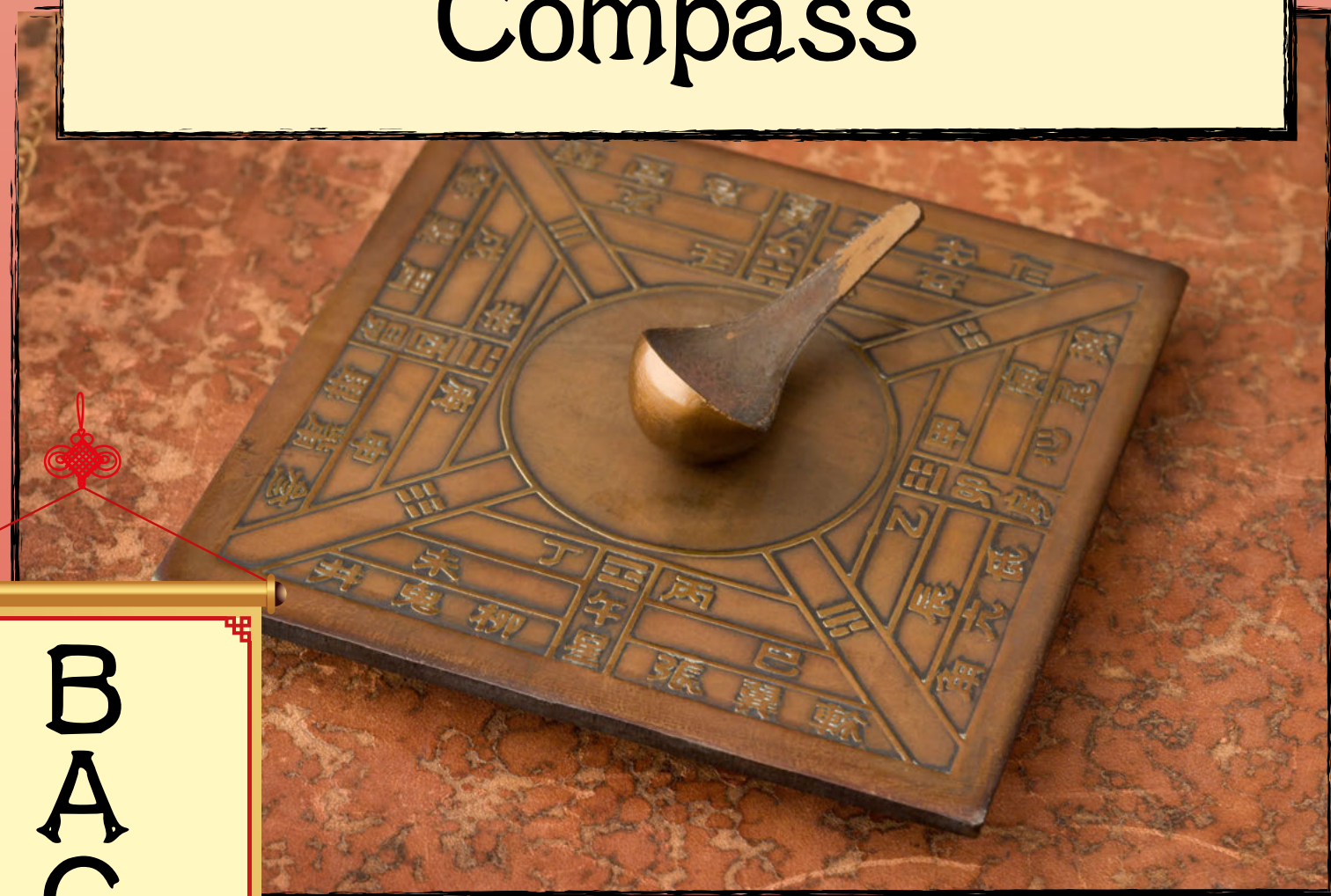


Gunpowder



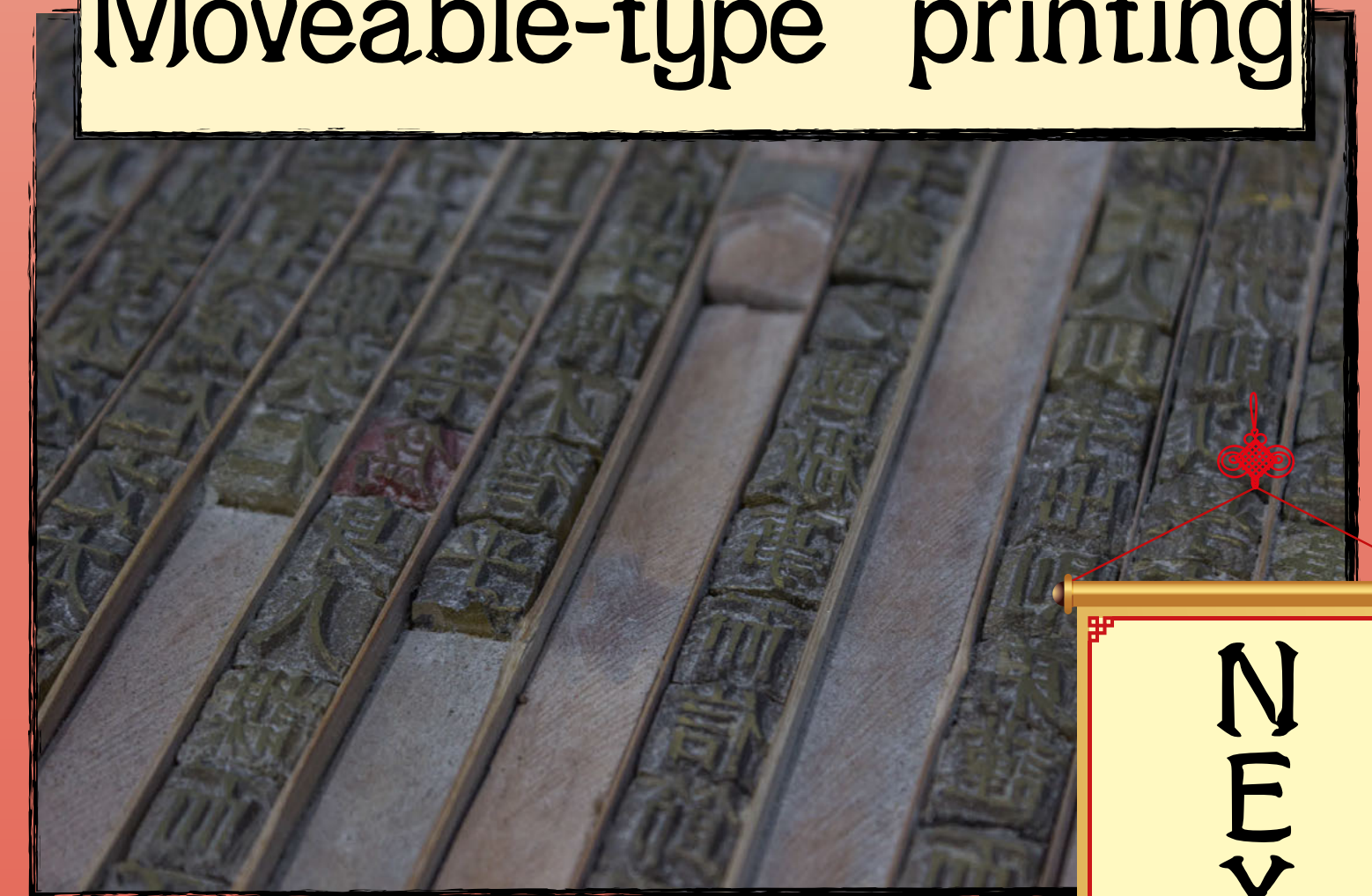
Were these on your  
greatest inventions  
list?

Compass



BACK

Moveable-type printing



NEXT

Why do you think  
these are considered  
to be the four  
greatest inventions  
from China?



By Hubertl, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=19416327>

Printing has been around for a long time. In its early uses, a wooden block would be carved to create the desired print. It was used to print text, images or patterns onto many different things such as fabrics. Some even used it in artwork.



A new block would have to be carved for each new colour or new page of a book.

BACK

NEXT

## Moveable-type printing



Moveable-type printing was invented around 1040 AD in China. Rather than carving a whole woodblock to print, Chinese characters were made from porcelain and placed within a frame, printed and then moved to create the next page of print.

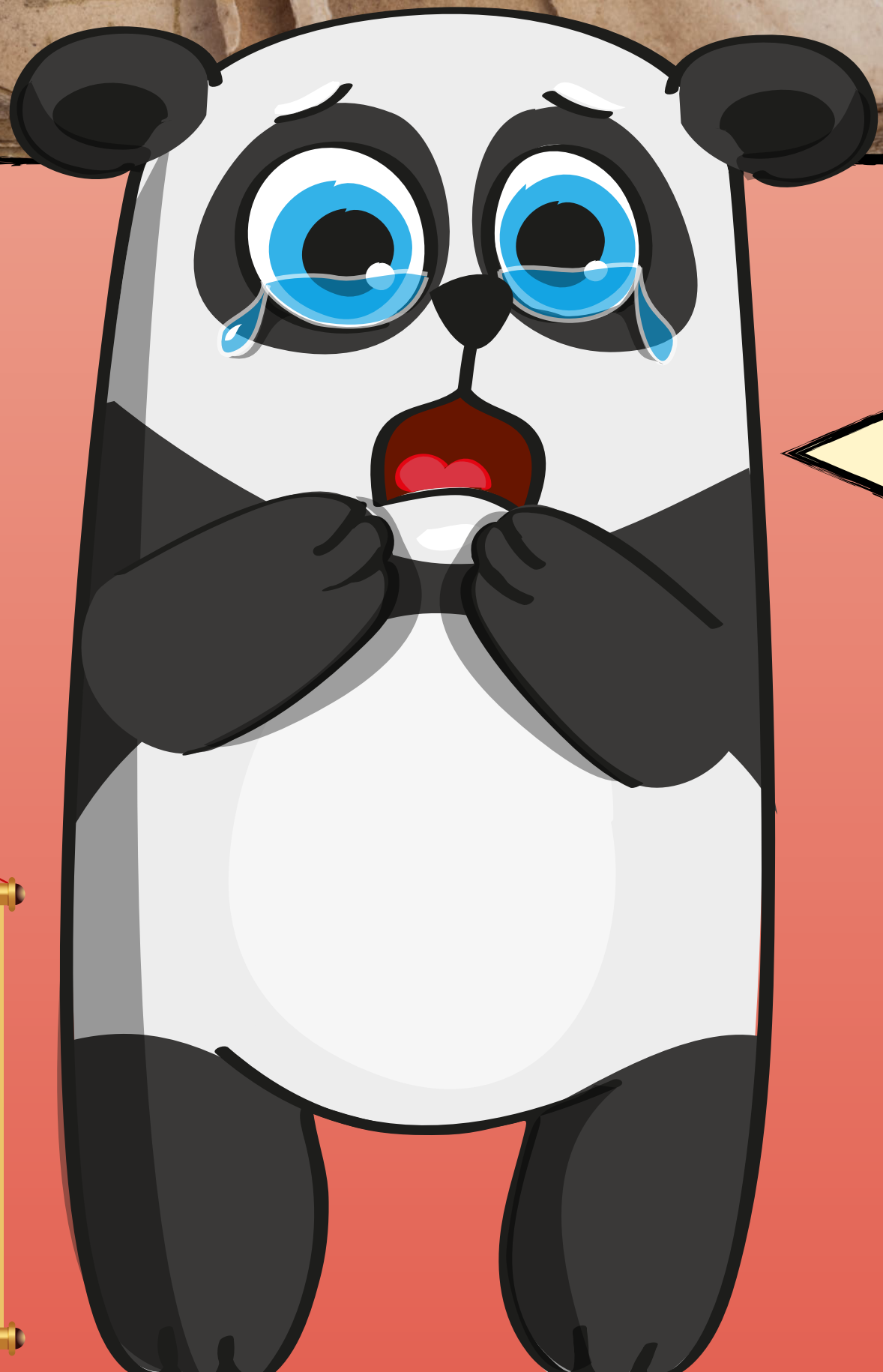
The written word could now be reproduced quickly and easily with this new method. How might this have changed people's lives at the time?

BACK

NEXT

## Paper

Think about all the things we use paper for today. It's almost impossible to get through a day without using some sort of paper!



What did people use before the invention of paper? How might this have affected their day-to-day lives?

BACK

NEXT

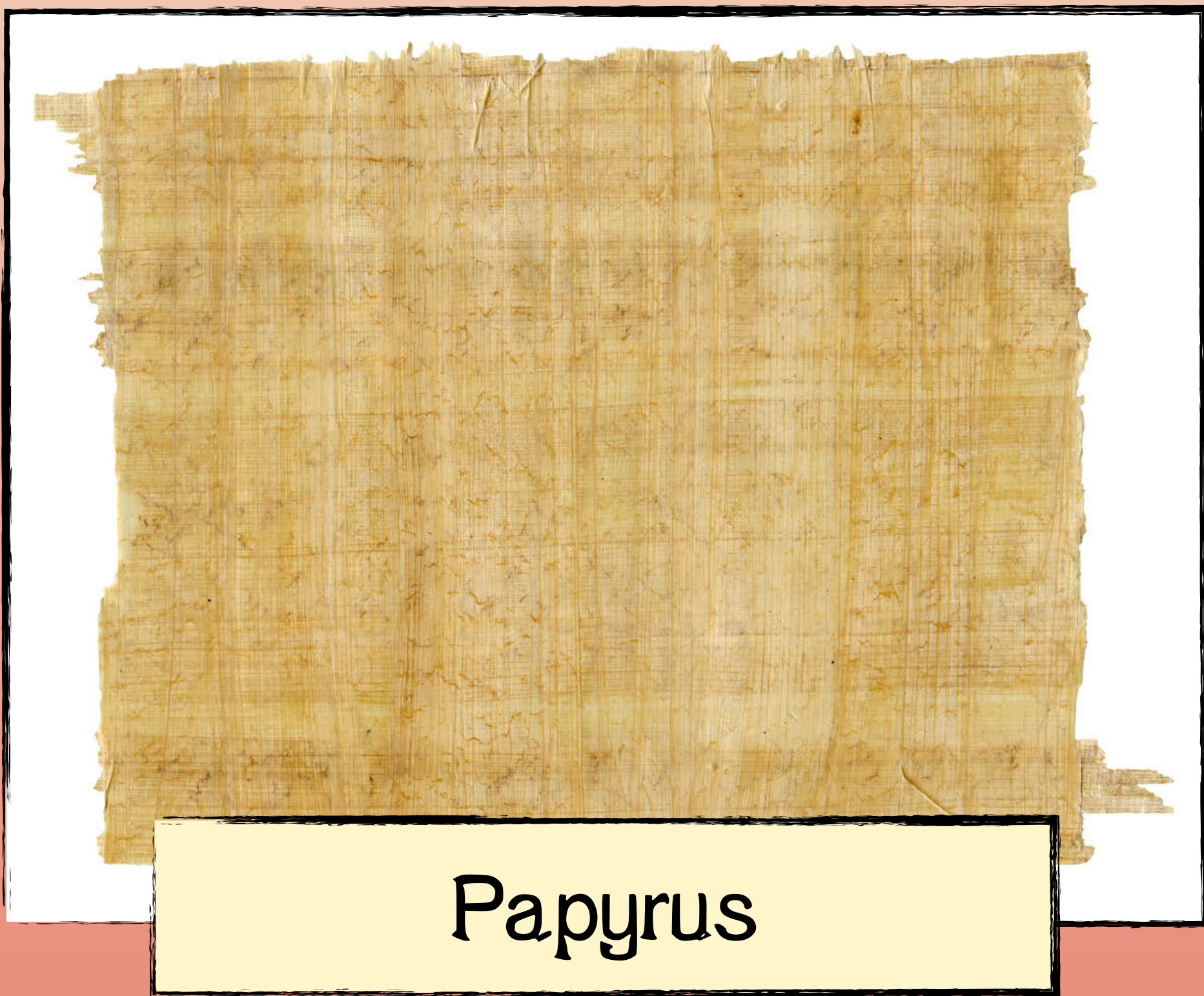


In China, people would have used scrolls made from bamboo reeds which were woven together. These were heavy, awkward to use and hard to transport. They may have also written on silk but this was expensive!

Using these impractical or expensive materials meant that often only important things were recorded. Books had to be kept short or written in parts.

BACK

NEXT



Other cultures around the world may have used rocks, papyrus (woven, pressed and dried papyrus plants), parchment (dried animal skins), slates or wax slates to write on before the invention of paper reached them.

Each of these had advantages and disadvantages. Most were expensive or impractical to use compared to paper which was invented in 105 AD.



BACK

NEXT

# Collecting Bamboo

The first step in the ancient Chinese process of paper making was to collect the raw material: bamboo. Later, materials such as cotton and linen rags were used as well.

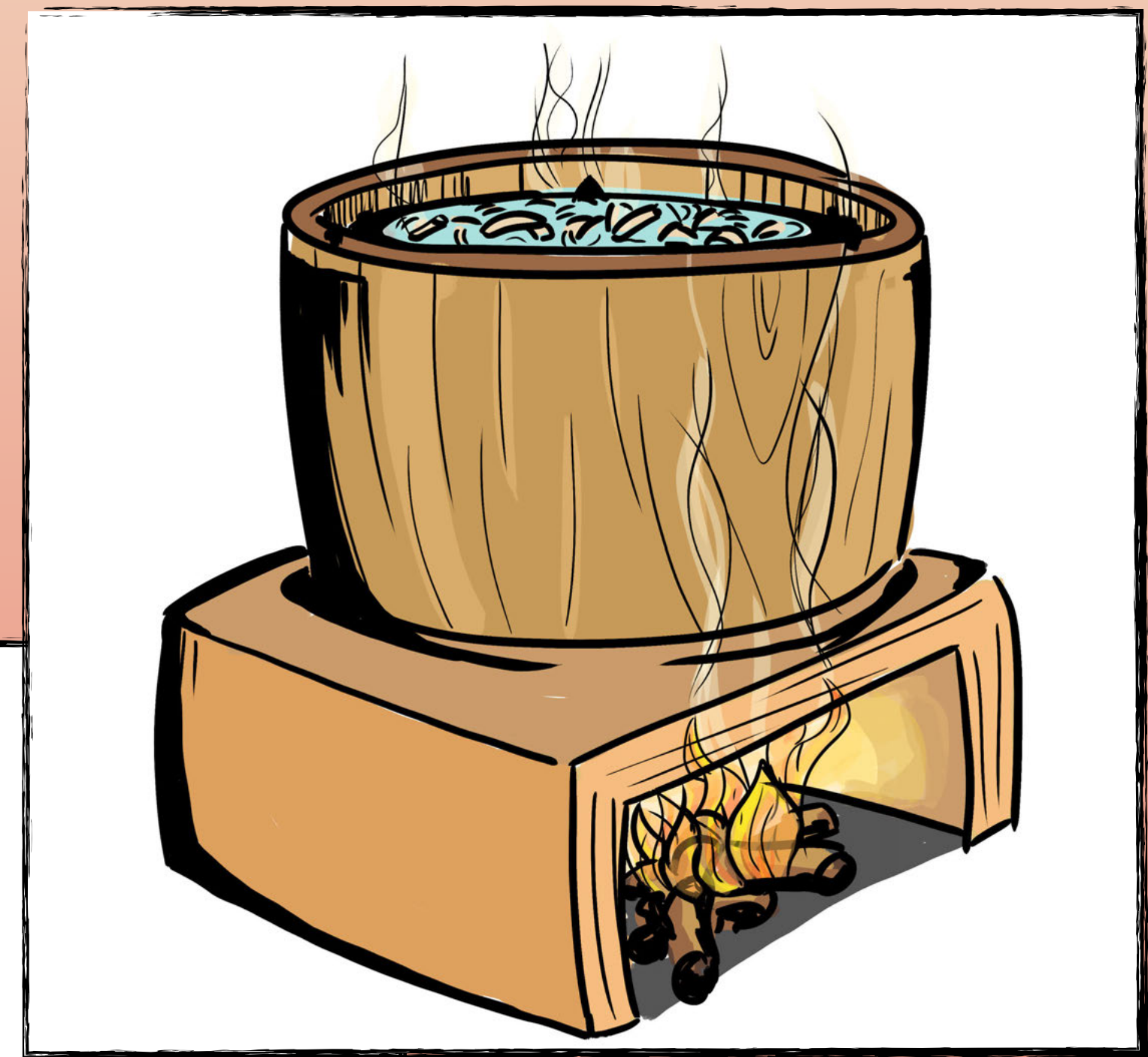


BACK

NEXT

# Pulp making

The bamboo was boiled and soaked for a long time to make it soft and begin to break apart. It was then mashed until the fibres in the plant turned into pulp. This was a key step in paper making.



BACK

NEXT

The soft pulp was mixed into water. A thin mesh screen would be dipped into the pulp solution. It was then swirled around until it was covered in a thin layer of pulp which would cling to the screen. The screen would then be lifted carefully out of the water.

## Screen dipping



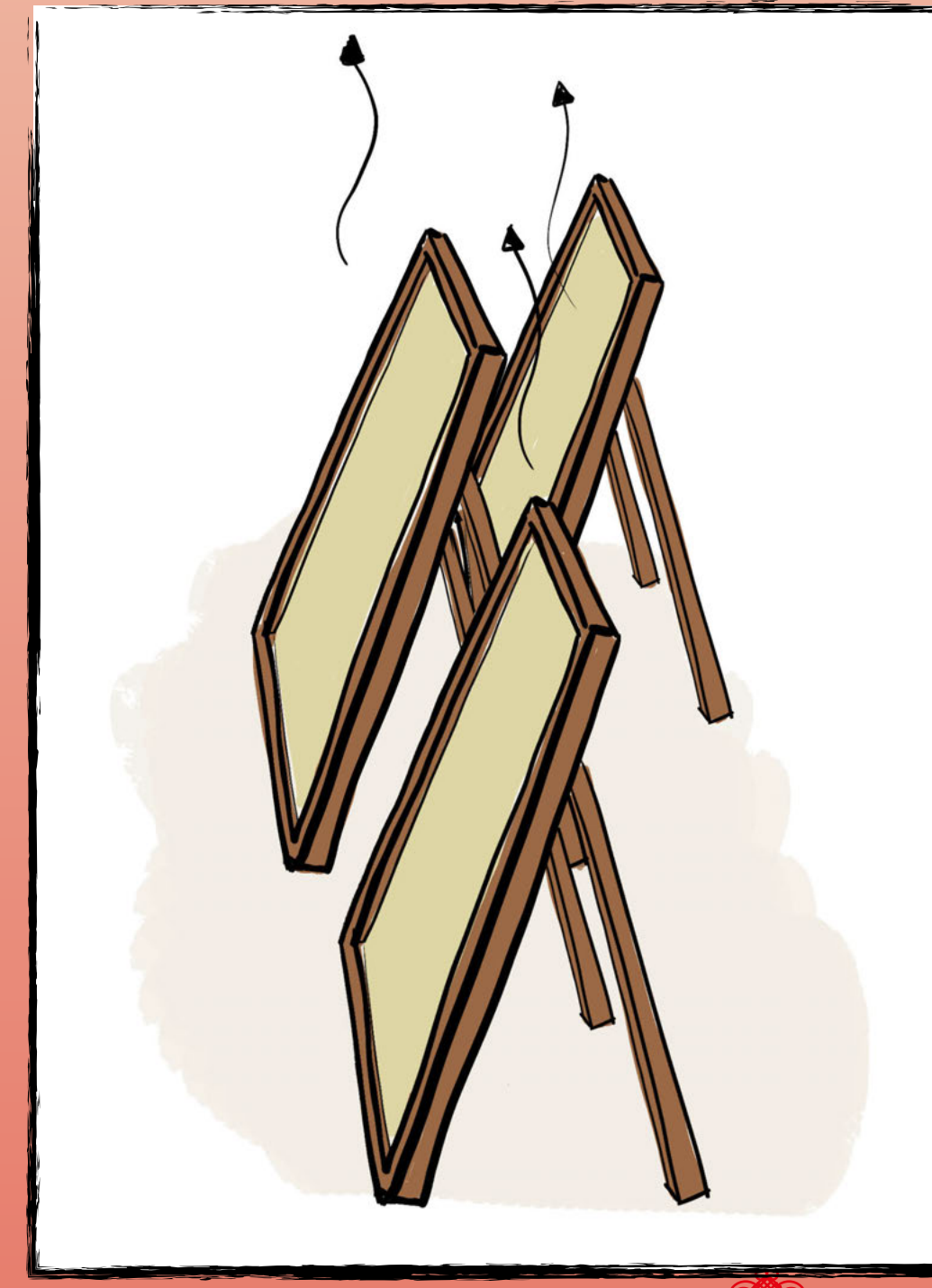
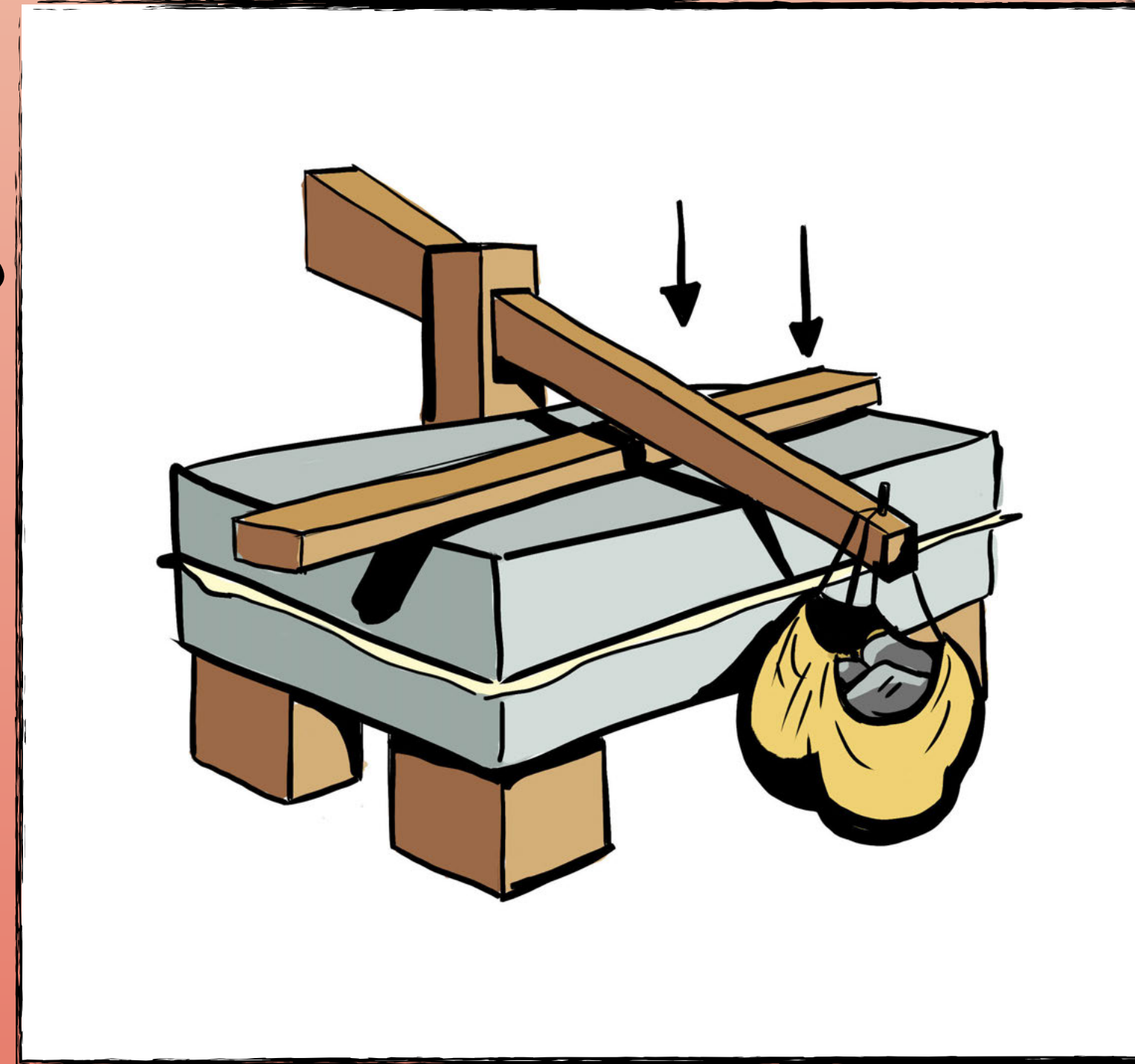
BACK

NEXT



The screen would be placed in a press to squeeze out the last remaining water and make sure the paper was as flat as possible. It would then be left to dry before it was peeled off the screen or couched (coo-ched).

Pressing, couching and drying.




The paper may have been pressed again to ensure the fibres have bonded and flatten it after drying.

BACK

NEXT

# Plenary



How might the invention of paper and the moveable-type printing press have changed people's lives when they were invented?

BACK

NEXT



In the Tang Dynasty, rich traders and merchants were struggling with the weight of the coins they had earned. They would take their coins to a trustworthy merchant and exchange them for a piece of paper stating how much money they had.

Thus, paper banknotes were born. They were named 'flying cash' as they had a tendency to fly away in the wind.