

## EPIC ENGINEERING

## CHINA'S GRAND CANAL

A. For centuries, the power of Chinese emperors rose and fell with their control of the Grand Canal. Today, this waterway is shorter than it once was, but it is still the longest man-made river in the world. Importantly, the Grand Canal continues to provide a vital cultural and economic link for modern China.

**Construction Begins**

B. The original canal system began around the year 605. China's Emperor Yang realized that he needed a better way to feed his army. Specifically, he needed a way to move food quickly from China's southern rice-growing region to the country's north. So, the emperor ordered the construction of the first section of the Grand Canal, connecting existing canals, lakes, and rivers. An estimated one million people—mostly farmers—worked on the construction, which took six years.

C. Over the next 500 years, the canal's importance grew. However, by 1127, parts had begun to **deteriorate**.<sup>1</sup> In 1279, Kublai Khan began to **repair** and build new parts of the canal. This **renovation** created a more direct north-south route to and from Beijing. Future rulers continued to expand and improve the waterway, and it eventually became a vital national lifeline.

D. In addition to moving rice around China, the Grand Canal was an important cultural **conduit**.<sup>2</sup> Soldiers, merchants, and artists **transported** ideas, **regional** foods, and cultural practices from one part of China to another. According to legend, this is how Beijing **acquired** two of its best-known trademarks. **Peking**<sup>3</sup> duck, a dish from Shandong Province, and the Peking opera, from Anhui and Hubei regions, were both brought north via the canal.

<sup>1</sup> If something **deteriorates**, it gets worse in some way.

<sup>2</sup> A **conduit** is something that connects two or more people, places, or things.

## The Modern Canal

E. For more than a thousand years, goods have been transported along the Grand Canal. Even today, the country's watery highway plays an important economic role in China. Boats continue to carry tons of coal, food, and other goods to points between Hangzhou and Jining—now the northernmost city the canal reaches. In addition, local governments—eager to increase tourism and real **estate**<sup>4</sup> development—are beautifying areas along the canal.

F. **This development comes at a price, though.** In Yangzhou, the city has torn down almost all of the older canal-side buildings. Farther south in the cities of Zhenjiang, Wuxi, and Hangzhou, the situation is similar. In Hangzhou, for example, almost all of the ancient buildings have been **demolished**. "Traditionally we talk about 18 main cities on the Grand Canal, and each had something unique and special about it," explains Zhou

Xinhua, the **former** vice director of the Grand Canal museum in Hangzhou. "But how many of these cities are all the same: a thousand people with one face."

G In 2005, a group of **citizens** proposed that the historic Grand Canal be made a UNESCO World Heritage Site. This status would protect both the waterway and the architecture around it. "Every generation wants the next generation to understand it, to look at its **monuments**," said Zhu Bingren, an artist who coauthored this **proposal**. UNESCO status was officially granted in 2014. The hope now is that the Grand Canal—one of the world's great engineering accomplishments—will continue to link north and south China for centuries to come.

<sup>3</sup> **Peking** is the former name for Beijing.

<sup>4</sup> **Real estate** is property in the form of land and buildings.

A boat travels down the

Beijing-Hangzhou Grand Canal.

**CHINA'S LIFELINE** This map shows the extent of China's Grand Canal at the height of its golden age (1368–1855). Running 1,770 kilometers from Beijing to Hangzhou, the canal transported everything from food to wood to textiles.

Beginning in 1751, Emperor Qianlong (above) made six inspection tours of the Grand Canal, visiting different ports and cultural sites. By 1855, the Yellow River had changed course, destroying parts of the canal.

#### **A. Choose the best answer for each question.**

##### **DETAIL**

1. Why was the Grand Canal originally built?
  - a. to allow the army to move quickly from the north to the south
  - b. to transport food from the southern regions of China to the north
  - c. to enable more people to visit remote parts of China
  - d. to promote the cultural and traditional diversity of south China

##### **DETAIL**

2. What is NOT true about the Grand Canal?
  - a. It originally took six years to complete its construction.
  - b. Even today, it is the longest man-made river in the world.
  - c. Around a million people worked on the first part of the canal.
  - d. It allowed Peking duck and the Peking opera to spread to southern China.

**MAIN IDEA**

3. What would be the best alternative heading for paragraph D?

- Renewed Importance
- Cultural Connections
- The Army's Highway
- The Origins of the Peking Opera

**PARAPHRASE**

4. Which of the following is closest in meaning to *This development comes at a price, though.* (paragraph F)?

- But developing the canal involves spending a lot of money.
- But even after spending money, people dislike the development.
- But developing it is a lot more expensive than one can imagine.
- But there are some negative consequences to this development.

**COHESION**

5. The following sentence would best be placed at the end of which paragraph? ***The city of Yangzhou, for example, has created a beautiful park near its waterfront.***

- A
- D
- E
- G

**TIMELINE****B. Add the events (a–f) to complete the timeline of the Grand Canal.**

- End of the canal's golden age.
- New parts of the canal built.
- Construction of the Grand Canal begins.
- Canal becomes a World Heritage Site.
- Emperor Qianlong first tours the canal.
- Construction is completed.

605 | 611 | 1279 | 1751 | 1855 | 2014

**DEFINITIONS**

A. Find and underline the compound words in paragraphs C and D. Then write them next to their definitions (1–4).

- \_\_\_\_\_ : most widely recognized
- \_\_\_\_\_ : a river or canal that can be used for travel
- \_\_\_\_\_ : special features that a person or place is known for
- \_\_\_\_\_ : something that provides help or support needed for survival

**COMPLETION**

**B. Complete the information with compound words. Use one word from box A and one word from box B for each item (1–6). Use a dictionary to help you.**

**A**

day man high life well with

**B**

light known made out time trip

In addition to the Grand Canal, China is 1 \_\_\_\_\_ for another 2 \_\_\_\_\_ wonder—the Great Wall. China's first emperor wanted a wall for protection. 3 \_\_\_\_\_ a wall, his country was vulnerable to attack from the north. Construction began during the first emperor's 4 \_\_\_\_\_, but work continued for many hundreds of years after his death. Each emperor added to the wall to protect his power. Construction continued until the wall was thousands of kilometers long. Today, the Great Wall still stands. It can be easily visited on a 5 \_\_\_\_\_ from Beijing and is a 6 \_\_\_\_\_ for many locals and international visitors.

**A. Complete the information. Circle the correct words.**

The 77-kilometer Panama Canal is one of the world's greatest engineering achievements. There were **1monuments / proposals** for a canal as early as the 16th century, but it wasn't until 1881 when the French started to build a canal. The United States **2 repaired / acquired** the canal project in the early 19th century for \$40 million. Construction was completed in 1914 under the supervision of chief engineer George Washington Goethals. A **3 citizen / monument** honoring Goethals stands today in Panama City. A recent \$5.2 billion **4 renovation / citizen** and expansion project allows much larger ships to pass through the canal. This has led to a sharp increase in the amount of goods that can be **5 demolished / transported** through the canal. Today, nearly 14,000 ships pass through the Panama Canal every year.

**WORD LINK:**

**C. The word renovation contains the root nov which means “new.” Complete the sentences with the correct word from the box. There is one extra word.**

innovate

novelty

novice

renovated

1. Companies that \_\_\_\_\_ do better than businesses that don't invest in new products and ideas.

2. Because of rust and structural issues, New York's iconic Statue of Liberty was \_\_\_\_\_ in the 1980s.

3. Cell phones were a \_\_\_\_\_ item in 1983. Now, almost everyone has one.