BUILDING BROOKLYN BRIDGE



1

1. Warm up

Discuss the following questions.



Picture A



Picture B



Picture C



Picture D

1. Do you know the names of the bridges in the photographs?
2. Which countries are they in?
3. Which ones have you visited/would you like to visit?
4. Are there any well-known bridges in your country? Which places do they connect?

LIVEWORKSHEETS

2

Focus on vocabulary: engineering vocabulary

Part A: Complete the following vocabulary and definitions with the missing vowels (a,e,i,o,u).

1. b _ dr _ ck - the solid stone found beneath soil and sand
2. st _ b _ l _ ty - the state of providing a solid foundation that will not move
3. h _ mp - a plant used to make strong material that can be used for cloth and rope
4. d _ c _ mpr _ ss _ _ n - a loss of air pressure

Part B: Match the definitions to the words in bold in the sentence.

1. With the rise in popularity of **hybrid** cars which use both electric and petrol for power, as well as purely electric cars, we may be witnessing the end of the domination of the petrol and gas industries.
2. As high winds were approaching, they ensured the tent was firmly **anchored** to the ground in several places before going to bed.
3. While the builders were **excavating** the area to prepare for the foundations, unexpectedly, a body was discovered.
4. In the roof, thick metal pipes **intersected** with each other to create added strength.
5. In the event of a problem, the machine was designed to shut the power off as a **fail-safe**.

a. make sure that something is unable to move from a particular position, usually for safety
b. create a hole in the ground by digging up the earth, usually for construction
c. consisting of two or more elements
d. cross or meet with something when talking about lines, roads or something straight
e. a measure to prevent a situation from getting much worse in the event of a problem.

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3 Discuss the following questions

1. What can happen if you get **tetanus**?

_____

2. What events could leave you **paralysed**?

_____

3. If you're **sceptical** about something, how do you feel about it?

_____

4. In what situation might you need to **evacuate**?

_____

5. What happens if you get **the bends**?

_____

6. Who do you know who is **indomitable**?

_____

7. What is your biggest **flaw**?

_____

8. What can be described as **gothic**?

_____

4 Watching for details

Watch the video about the building of the Brooklyn Bridge and write down what the following numbers mean.

a. 14: _____

b. 90: _____

c. 480: _____

d. 5,600: _____

e. 14,680: _____

f. 400 million: _____

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5 Understanding the video

Decide which is the best answer to the following questions.

1. **Why were New York City officials worried about building a new suspension bridge?**
   a. It was going to be too expensive for the city to afford to build.
   b. There weren't enough skilled workers to make one at the time.
   c. Similar bridges in Europe had been falling to pieces in bad weather.

2. **What did John Roebling do to deal with the problem?**
   a. His design mixed different models of bridge that made it much more stable.
   b. He made the bridge a lot more flexible and able to cope with different weights.
   c. He offered to pay for part of the construction of the bridge himself.

3. **Why didn't Roebling's design use the traditional hemp rope?**
   a. There wasn't enough available due to the size of the bridge.
   b. It was going to cost too much to provide.
   c. The weight of the bridge meant it wasn't a practical material to use.

4. **Why didn't Roebling continue with the project?**
   a. He retired from the job due to his age.
   b. He died as a result of wounds from an accident on the site.
   c. He was killed by a boat which hit him while he worked.

5. **Which new invention allowed them to build the foundations for the bridge?**
   a. An airtight box which allowed workers to drill underwater.
   b. Special pumps which helped them dig.
   c. An air lock which helped them see what they were doing underwater.

6. **What happened after Washington Roebling's accident?**
   a. Work on the bridge was stopped for almost six months.
   b. His wife, Emily, continued the work in his place.
   c. Workmen continued with their work without a chief engineer.

7. **What other problems did the bridge have?**
   a. Part of it collapsed into the water, so it cost more money to replace it.
   b. They couldn't find the right kind of metal to use to support the bridge.
   c. It took longer and cost more than had been planned.

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6 Scanning for details

Quickly read the article and find what happened in the following years.

a. 1872: _____

b. 1875: _____

c. 1878: _____

d. 1883: _____

e. 1896: _____

f. 1936: _____

7 Reading comprehension

Part A: Complete the table by ticking the correct box to answer the questions.

Who...	Parker	Tweed	Roebling
1. had a lot of control over the building of the Brooklyn Bridge?			
2. died in prison?			
3. met royalty?			
4. travelled to a foreign country?			
5. pretended to be someone else?			
6. was a positive example to others?			
7. saw the completed Brooklyn Bridge?			
8. had other people make fun of them?			

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The Brooklyn Bridge

People of the time

A. George C Parker

A famous American conman named George C. Parker became famous for tricking recent immigrants to New York City to buy the Brooklyn Bridge from him. He used fake documents to convince them he was the owner. There were several incidents of police having to remove his victims from the bridge as they tried to set up a place to start charging people cross, thinking they were going to get rich. Parker was an expert at deception. Once, after he'd been arrested and taken to court, he simply put on the hat and the coat of the sheriff who arrested him and quietly walked out. His crimes caught up with him however, and spent the last eight years of his life in Sing Sing Prison until his death in 1936. To this day, if people think they're talking to someone particularly gullible, they will still say, 'If you believe that, I've got a bridge to sell you...'

B. William 'Boss' Tweed

To secure the permission for the Brooklyn Bridge's construction, Roebling had to arrange for a corrupt politician by the name of William 'Boss' Tweed to be given $60,000 which was then distributed to city officials. Tweed also had stocks in the company which constructed the bridge and therefore, had a lot of control over the project. His crimes were eventually exposed after he'd managed to amass, by some estimates, over $200 million for himself by using public money to increase his personal wealth. He was arrested and sent to prison. In December 1875, he escaped and got as far as Spain disguised as a sailor. However, due to cartoons of him, he was rearrested and handed over to the USS Franklin, an American Warship who brought him back to the US. He died three years later at the age of 55 from pneumonia which he caught as a result of the poor conditions in his cell.

C. Emily Roebling

After her husband - the engineer Washington A. Roebling - was incapacitated in 1872 during the construction of the Brooklyn Bridge, Emily Roebling took over project management and supervision of the bridge building in his name. She was so effective that it was thought that she was also involved in the design of the bridge. It was as a result of her work that her husband was allowed to remain as the chief engineer. When the Brooklyn Bridge finally opened in May 1883, Emily was officially the first person to cross it. She took a rooster with her for good luck. Also at the ceremony was the then President of the United States, Chester A. Arthur and the mayors of New York and Brooklyn. Emily went on to do much work for women's causes and is regarded as a feminist icon. She also travelled extensively, meeting Queen Victoria in the UK and was present at the coronation of Tsar Nicolas II in St Petersburg in Russia in 1896. She went on to study law at the University of New York. She died at the age of 59 in 1903 and you can still see a sign in memory of her, her husband, and her father-in-law on the Brooklyn Bridge today.

Sources: The Fact Life, Wikipedia



LIVEWORKSHEETS

Part B: Complete the following sentences with one or two words from the article on page six.

1. George C Parker made people believe he was able to sell them the Brooklyn Bridge by showing them_____.
2. Even though he was very powerful, William Tweed was eventually_____as a criminal for stealing public money for his personal interests.
3. At the opening ceremony for the Brooklyn Bridge, Emily Roebling crossed the bridge with _____.

8 Talking point

Discuss the following questions.

1. Have there been any cases in your country where someone who was very powerful has been found to be corrupt? What happened to them?
2. Is there anyone in your country who is famous for tricking people out of money? What happened to them?
3. Is there any information in the video or article which surprised you? Why did it surprise you?
4. What buildings are famous for taking a long time to build in your country?
5. When were they built and how long did it take? Was anyone injured or killed while it was being made?

9 Extended activity

Find words in the article on page six which mean the same as the following definitions.

1. _____ a person who tries to make money illegally, by making people believe things that are not true (n, Parker)
2. _____ the act of making someone believe something that isn't true (n, Parker)
3. _____ being easy to trick and quick to believe lies (adj., Parker)
4. _____ using power to illegally make money for personal gain (adj., Tweed)
5. _____ collect a large amount of something (v, Tweed)
6. _____ a serious disease that makes it difficult to breathe by affecting the lungs (n, Tweed)
7. _____ cause someone to be unable to be active or work (v, Roebling)
8. _____ a person who believes women should have equal rights to men (n, Roebling)
9. _____ an occasion in which a person officially becomes the most powerful person country (n, Roebling)

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