
Record-breaking bridge

WORKSHEET A

On 30th June, China added to its list of spectacular engineering achievements by opening the world's longest bridge over water. The Y-shaped Jiaozhou Bay Bridge, connecting the city of Qingdao on the coast of eastern China with the district of Huangdao and the island of Hongdao, is more than 42 kilometres (26 miles) long, meaning that to run its entire length (if anyone ever tried) would be the equivalent of completing a marathon.

Designed by Chinese engineers, the bridge stands on 5,200 pillars and includes around 450,000 tons of metal – the equivalent of more than 60 Eiffel Towers. It should be strong enough to withstand not only a big ship hitting it, but also earthquakes and typhoons.

Most of the bridge consists of two three-lane roads that carry traffic in opposite directions. It will be free to use for one month, but after that drivers will have to pay a toll.

It was immediately included in *Guinness World Records*, a decision criticised by some people in Louisiana, in the southern United States, which is where the bridge previously considered the world's longest over water can be found. They point out that the Lake Pontchartrain Causeway Bridge, built in the 1950s, measures around 39 kilometres in a straight line, which is greater than the total distance in straight lines between the ends of the Jiaozhou Bay Bridge. Because the Chinese bridge is curved, however, its roads are longer.

After 2016 there will probably be no more argument about who has the longest bridge over water, because that's when China plans to open an even longer bridge: one stretching 48 kilometres over the Pearl River Estuary between Hong Kong, Macau, and Guangdong province.

In fact, in the last ten years China has built seven of the world's ten longest bridges – including the longest of any kind, a 165-kilometre section (over land, not water) of the Beijing–Shanghai high-speed railway – as well as the world's biggest power station (Three Gorges Dam on the Yangtze River), thousands of kilometres of roads and countless skyscrapers. Chinese engineers are even building a 600-metre bridge for San Francisco Bay in California; when it is ready it will be shipped across the Pacific Ocean in separate parts and then put together on arrival.

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WORKSHEET B

Exercise 1

Here are some simple definitions for words that appear in the text on Worksheet A.

Find the words they refer to and fill in the gaps.

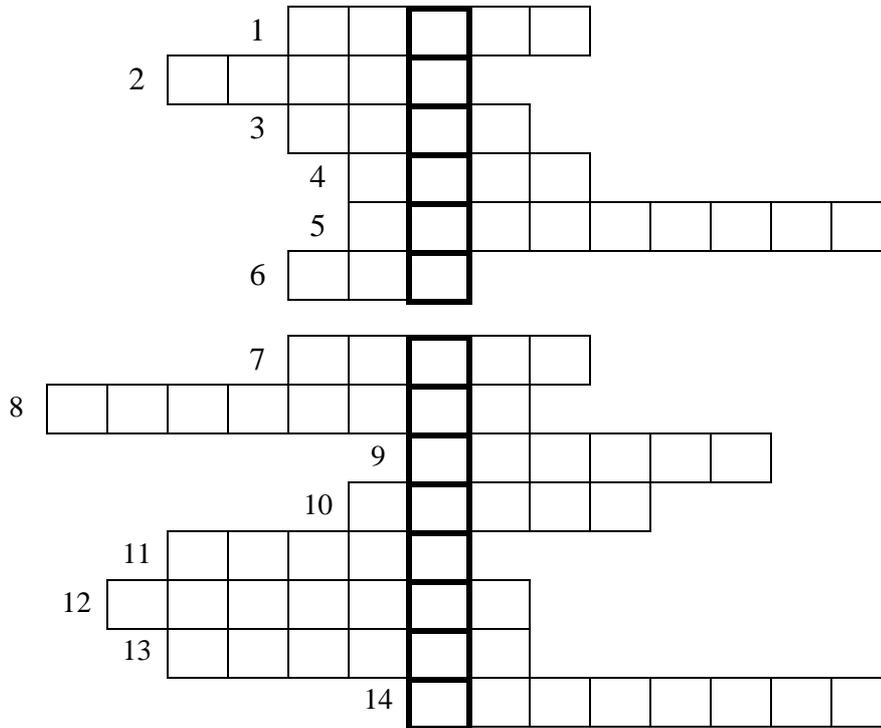
1. _ _ _ _ _ **ss** (adjective): so many that it is difficult or impossible to count them
2. **w _ _ _ st _ _ _** (verb): to be strong enough not to be harmed or destroyed by something
3. **p _ _ _ _ _** (noun): a thick, strong, vertical post that supports part of a building
4. **s _ _ _ _ _ _ _ _ r** (adjective): very impressive
5. **_ y _ _ _ _ _** (noun): a storm with very strong winds
6. **_ _ _ ire** (adjective): used to mean all or every part of something
7. **_ u _ _ e _** (adjective): having a shape or line with a bend; not straight
8. **_ _ _ sc _ _ _ e _** (noun): extremely tall building
9. **r _ _ _ _ d** (noun): the best achievement so far in a particular activity (often a sport)
10. When we talk about what something **_ on _ _ _ _ s _ f** (phrasal verb), we mean the things or parts it is made of.
11. **l _ n _** (noun): one of the parts that a major road is usually divided into (The parts are marked by painted lines and carry separate lines of traffic.)
12. **_ _ _ in _ _ r _ _ _** (noun): the activity of designing things such as roads, railways, bridges, or machines
13. **_ _ w _ _ _ t _ t _ _ _** (noun): a large building that contains machines which produce power, especially electricity
14. **p _ _ _ _ _ u _** (phrasal verb): to tell someone something (often something that you think they need to know or should remember)
15. **_ o _ _** (noun): money you pay to use a bridge or a road

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WORKSHEET C

Exercise 2

Complete the crossword below. If all the words are correct, the number of motor vehicles expected to use the Jiaozhou Bay Bridge every day will read from top to bottom.



1. Like the Jiaozhou Bay Bridge, the 48-kilometre bridge China plans to open in 2016 will also be over _____.
2. The Lake Pontchartrain Causeway Bridge is in the _____ of the United States.
3. The plan is to _____ the 600-metre bridge for San Francisco Bay from China to California in separate parts.
4. The Jiaozhou Bay Bridge will only be _____ to use for a short time.
5. It _____ more than 42 kilometres.
6. It carries traffic across a _____.
7. The Eiffel Tower is made mostly of _____.
8. The Lake Pontchartrain Causeway Bridge is different from the Jiaozhou Bay Bridge in that its road is _____.
9. The Jiaozhou Bay Bridge _____ at the end of June.
10. In the last ten years China has _____ the world's biggest power station.
11. _____ on the Jiaozhou Bay Bridge have three lanes.
12. The world's longest bridge of any kind forms part of a _____ in China.
13. The Jiaozhou Bay Bridge has been built to be extremely _____.
14. The total _____ across the Jiaozhou Bay Bridge is about the same as that of a marathon.