

4F

Reading

The Longitude Prize

I can understand an article about science.

1 **VOCABULARY** Match the pictures of measuring devices to the words below. What does each device do?

stopwatch foot measure pressure gauge
thermostat marine chronometer theodolite



Reading Strategy

In a multiple-choice task:

- When you do a gapped sentences task, first read the text quickly to find out what it is about.
- Then read the text more carefully and think about what information is missing in each gap.
- Look at the parts of the text before and after each gap to find words or information that link it to one of the missing sentences.
- Pay attention to vocabulary and grammar structures which may also provide ideas.
- After you have matched a sentence to each gap, check that the remaining sentence doesn't match any of the gaps.

4 Read the Reading Strategy. Match the missing sentences (A–D) with the gaps (1–3). There is one extra sentence.

A The Longitude Prize was no ordinary competition.

B One thousand, four hundred sailors were drowned.



C The competition was quite fierce.

D The new men of the sea said that a change in temperature destroyed the delicate parts.

LIVEWORKSHEETS



The World's First GPS

4F

2.11

On a stormy night in 1707, four ships struck rocks off the south coast of England and sank. ¹ _____ The ships had crashed because they had no way of knowing how far they had travelled in a particular direction; they could not calculate their longitude, which required accurate time measurement. It was the most serious in a series of accidents at sea, and a stunned British government decided to act. In such difficult circumstances, they believed that the best response to the disaster was a competition: the Longitude Prize. ² _____. To win it, someone had to find a way of calculating how far a ship had travelled east or west from its point of departure. Geniuses such as Sir Isaac Newton had failed to find a solution, so to ensure the interest of Britain's greatest scientific minds, the government offered a prize of £20,000 – the equivalent of £2.6 million in today's money. But to everyone's surprise, it wasn't a famous academic who solved the problem, but an unknown carpenter.

When John Harrison wasn't working with wood, he was making clocks. An accurate clock would allow sailors to calculate their position, but at the time it was thought impossible to create a mechanical clock that could work on a ship. ³ _____. However, after three frustrated attempts, Harrison's fourth sea clock, H4, finally triumphed. Its mechanics were so good that the H4 worked better than most clocks on land.

The Longitude Prize and Harrison's success generated a lot of interest in the 18th century, but it was soon forgotten. However, in 2013, the British government created a new Longitude Prize, offering \$10 million to the person who could solve a great challenge to humanity. An enthralled public then took part in a TV programme where viewers chose one challenge from a list of 10 for scientists to focus on. The question was: will someone be able to solve it just as well as Harrison did the century before?