

THE ENGINEERING FORUM

1 **2** These were problems that people struggled with for a long time, until engineers took matters into their own hands.

3 The short answer is that an engineer is someone who wants to know how and why things work. Now, that is not quite all. Besides being naturally curious, an engineer is a person who designs and builds things like machines or systems, or structures, that help solve a specific problem.

There's more than just one type of engineer, too. But no matter what type of engineer someone is, they have to ask themselves three very important questions when they're working:

4 **5** **6**

Let's take a look at one example. A really famous example of engineering is the Golden Gate Bridge in San Francisco, California. I mentioned that there are different kinds of engineers, and a civil engineer brought the Golden Gate Bridge to life. **7**

In this project:

**WHAT WAS THE PROBLEM
THAT NEEDED TO BE SOLVED?**

WHO HAD THE PROBLEM?

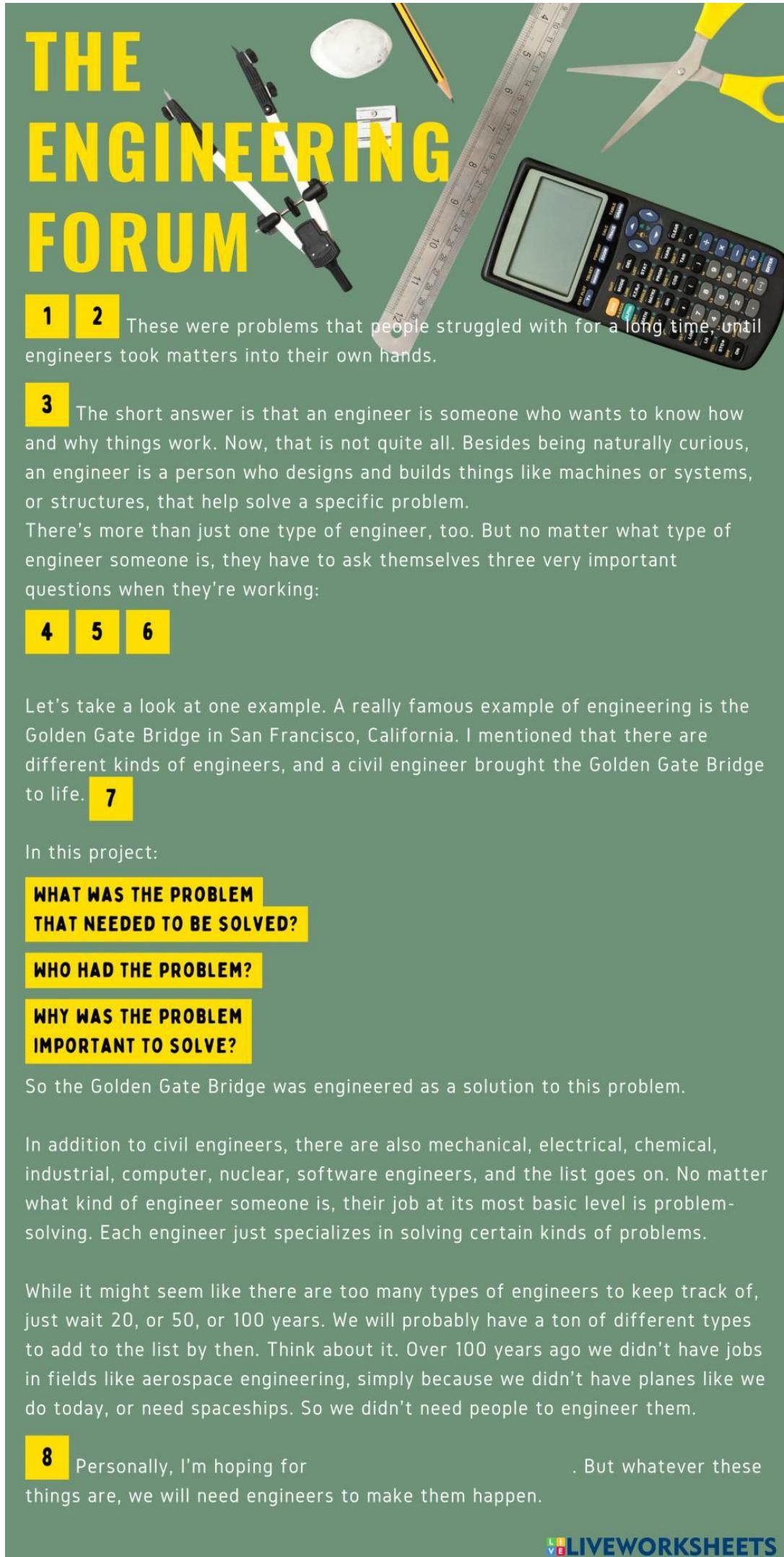
**WHY WAS THE PROBLEM
IMPORTANT TO SOLVE?**

So the Golden Gate Bridge was engineered as a solution to this problem.

In addition to civil engineers, there are also mechanical, electrical, chemical, industrial, computer, nuclear, software engineers, and the list goes on. No matter what kind of engineer someone is, their job at its most basic level is problem-solving. Each engineer just specializes in solving certain kinds of problems.

While it might seem like there are too many types of engineers to keep track of, just wait 20, or 50, or 100 years. We will probably have a ton of different types to add to the list by then. Think about it. Over 100 years ago we didn't have jobs in fields like aerospace engineering, simply because we didn't have planes like we do today, or need spaceships. So we didn't need people to engineer them.

8 Personally, I'm hoping for . But whatever these things are, we will need engineers to make them happen.



QUESTIONS FOR THE BLANKS:

- But is the future really that uncertain?
- How can we communicate with people who live far away?
- Will engineering continue to evolve enough for new branches to appear?
- Why is it important to solve the problem?
- How did he do that?
- How can we create a peaceful society?
- Who knows what machines or tools or everyday objects we will have in the year 3024?
- And what about his team?
- But do you know what an engineer is?
- What are the consequences of the problem that needs to be solved?
- What is the problem that needs to be solved?
- When and where does the problem happen?
- How do we cure diseases so we can live longer?
- Who has the problem that needs to be solved?
- Do you know his name?
- How do we get around from place to place without having to walk everywhere?
- But do you know what engineering is?