

At 2,200 meters, the Humber Bridge is one of the \_\_\_\_\_ suspension bridges in the world. It's an engineering masterpiece. But up here, hidden among the concrete and the \_\_\_\_\_, is an engineering miracle, the spider's web. Unchanged in over 100 million years, it's one of nature's most \_\_\_\_\_ designs. Researchers the world over are trying to discover its microscopic secrets. To study \_\_\_\_\_, first you have to catch one. We now have our spider.

Let's take a closer \_\_\_\_\_ at the thread. This spider can produce over 700 metres of \_\_\_\_\_ in one continuous thread. Each spider can produce several different types of silk, from sticky sheets to an incredibly strong single thread. If this thread were as thick as a \_\_\_\_\_, it could pull an ocean liner. The secret of the web lies in the water droplets at every junction. \_\_\_\_\_ each droplet, strands of web are tightly curled.

These strands unravel, allowing the web to stretch without \_\_\_\_\_. We've already learned from some of the spider's tricks. Now we are using the microscopic secrets of the \_\_\_\_\_ world to design completely new man-made structures.

Choose the correct answer to the questions:

1. What is special about the spider's web?
  - A. It is made of metal
  - B. It has remained unchanged for over 100 million years
  - C. It is located on the Humber Bridge
  - D. It can pull an ocean liner
  
2. How much silk can this spider produce in one continuous thread?
  - A. 100 meters

- B. 500 meters
- C. Over 700 meters
- D. 1000 meters

3. What makes the spider's web unique?

- A. Its color
- B. Water droplets at each junction
- C. Its location
- D. Its size

4. What can researchers learn from the spider's web?

- A. How to build bridges
- B. How to design new man-made structures
- C. How to catch spiders
- D. How to measure silk

5. What happens to the web strands inside the water droplets?

- A. They break
- B. They become sticky
- C. They are tightly curled
- D. They disappear

6. What comparison is made about the spider's thread strength?

- A. It can lift a car
- B. It can pull an ocean liner if as thick as a pencil
- C. It can support a house
- D. It can hold a person's weight

7. What types of silk can this spider produce?

A. Only sticky silk

B. Only strong threads

C. Sticky sheets and strong single threads

D. Metal threads