

# STATUE OF LIBERTY BY REBECCA HINSON

(HISTORY/NONFICTION)

## Questions for *Statue of Liberty* by Rebecca Hinson

### LEVEL 1: What does it say?

#### General Understanding

- Quote accurately from the text to explain the joint effort by France and the United States of America to create *Liberty Enlightening the World*.

#### Key Details

- What did the Roman goddess Libertas have to do with the Statue of Liberty?
- Explain the steps of construction of the statue.
- Interpret the meaning of the statue, based on specific information in the text.

### LEVEL 2: How does it work?

#### Vocabulary

- Determine the meaning of enlightening, colony, founded, levied, traitors, revolutionary, squadron, secured, outlawed, monument, commitment, bust, torch-bearing, balcony, symbolizing, pedestal, hammering, framework, cradled, continents, laden, disassembled, reassembled, plaque, sonnet, and humankind.

#### Structure

- Both the *Statue of Liberty* and the *Citadelle La Ferrière* both give reasons why structures were created, how the structures were made, and the meaning of each structure. How are the overall structures of these books different?

#### Author's Craft

- Analyze *Statue of Liberty* and the following UNESCO text, noting important similarities and differences in the points of view they represent.

Unesco:

The Statue of Liberty, a hollow colossus composed of thinly pounded copper sheets over a steel framework, stands on an island at the entrance to New York Harbor. It was designed by sculptor Frédéric Bartholdi in collaboration with engineer Gustave Eiffel, and was a gift from France on the centenary of American independence in 1876. Its design

and construction were recognized at the time as one of the greatest technical achievements of the 19th century and hailed as a bridge between art and engineering. Atop its pedestal (designed by American architect Richard Morris Hunt), the Statue has welcomed millions of immigrants to the United States since it was dedicated in 1886.

The Statue is a masterpiece of colossal statuary, which found renewed expression in the 19th century, after the tradition of those of antiquity, but with intimations of Art Nouveau. Drawing on classical elements and iconography, it expressed modern aspirations. The interior iron framework is a formidable and intricate piece of construction, a harbinger of the future in engineering, architecture, and art, including the extensive use of concrete in the base, the flexible curtain-wall type of construction that supports the skin, and the use of electricity to light the torch. Édouard René de Laboulaye collaborated with Bartholdi for the concept of the Statue to embody international friendship, peace, and progress, and specifically the historical alliance between France and the United States. Its financing by international subscription was also significant. Highly potent symbolic elements of the design include the United States Declaration of Independence, which the Statue holds in her left hand, as well as the broken shackles from which she steps.

This colossal statue is a masterpiece of the human spirit. The collaboration between the sculptor Frédéric Bartholdi and the engineer Gustave Eiffel resulted in the production of a technological wonder that brings together art and engineering in a new and powerful way.

The symbolic value of the Statue of Liberty lies in two basic factors. It was presented by France with the intention of affirming the historical alliance between the two nations. It was financed by international subscription in recognition of the establishment of the principles of freedom and democracy by the United States of America's Declaration of Independence, which the Statue holds in her left hand. The Statue also soon became and has endured as a symbol of the migration of people from many countries into the United States in the late 19th and the early 20th centuries. She endures as a highly potent symbol – inspiring contemplation, debate, and protest – of ideals such as liberty, peace, human rights, abolition of slavery, democracy, and opportunity.

### LEVEL 3: What does it mean?

#### **Author's Purpose**

- The author claims that the alliance forged between the United States of America and France during the American Revolution was not the only source of inspiration for the statue. How does she use evidence to support her claim that the Thirteenth Amendment to the United States Constitution was also an important factor?

## Intertextual Connections

- Draw information from the texts below to learn about engineering which allowed for movement from wind and temperature changes.

Purdue University, Materials Engineering:

One of the tricks in the design of the statue was allowing for thermal expansion in the copper. When a material goes through temperature changes, the dimensions change. The skeletal framework allows the copper shell to move independently yet stand upright. The Statue of Liberty stands 305 feet tall, and used 31 tons of copper and 125 tons of steel. Winds of 50 miles per hour cause the statue to sway 3 inches and the torch to sway 5 inches.

The Seventy Wonders of the Modern World:

The central tower supported the sculpted external skin of the monument on a strong but flexible framework of 1350 ribs and verticals made of puddled iron, a contemporary material similar to cast iron. These were fixed to the external skin of copper using copper saddles and copper rivets. This detail allowed for movement resulting both from wind loading and temperature differentiations. Eiffel also recognized the electrolytic incompatibility of iron and copper and placed a barrier between the two.

Copper Development Association Incorporated:

Now, here's where the neat part comes in. The copper skin sections are attached to the armature by 1500 U-shaped copper saddles, using some 300,000 copper rivets. Now, Eiffel knew about galvanic corrosion between the dissimilar metals - copper and steel. . . . Ultimately, it was the Americans who came up with the barrier system finally used when the statue was reassembled. They isolated the junction of the copper and iron with a layer of shellac-impregnated asbestos cloth.

The saddle design was ingenious. Copper and Iron expand and contract at different rates. So, the free movement of the separate metals allowed them to accommodate the changes in temperature as well as other weather conditions.

## LEVEL 4: What does it inspire you to do?

### Opinion with Evidence or Argument

- Integrate information from Hinson's text, all the texts above, and the text below in order to write or speak about the Statue of Liberty knowledgeably.

The Seventy Wonders of the Modern World:

The Statue of Liberty, the gigantic figure constructed on Liberty Island in Upper New York Bay, symbolizes the gateway to the New World. The monumental sculpture, the

inspiration of a prominent French legal scholar and politician, Edouard-René Lefebvre de Laboulaye, was given to the people of the United States by the French in 1884 to commemorate a hundred years of American independence. Sited to face the city's harbor, the copper-sheathed figure represents a woman draped in Classical robes and wearing a crown with seven spikes. The broken shackles of slavery lie at her feet and in her uplifted right hand she holds a torch. In her left hand she holds a book which is inscribed with the date of the Declaration of Independence – 4 July 1776. The statue itself is 46 m (151 ft 5 in) high, comparable in size to the highest skyscraper at that time, and with its base it towers 93 m (305 ft).

### **Sources**

Rebecca Hinson, *Citadelle La Ferrière*

Neil Parkyn, *The Seventy Wonders of the Modern World*

Purdue University, Materials Engineering

<https://engineering.purdue.edu/MSE/aboutus/gotmaterials/Parks/thomas.html>

Copper Development Association Inc.

[https://www.copper.org/education/liberty/liberty\\_design3.html](https://www.copper.org/education/liberty/liberty_design3.html)

United Nations Education, Scientific and Cultural Organization, Statue of Liberty

<http://whc.unesco.org/en/list/307>