

**Informational Text Pack
for February**

*Hearts
and
Ferris Wheels*

By Margaret Whisnant



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Getting to the Heart of the Matter

by Margaret Whisnant

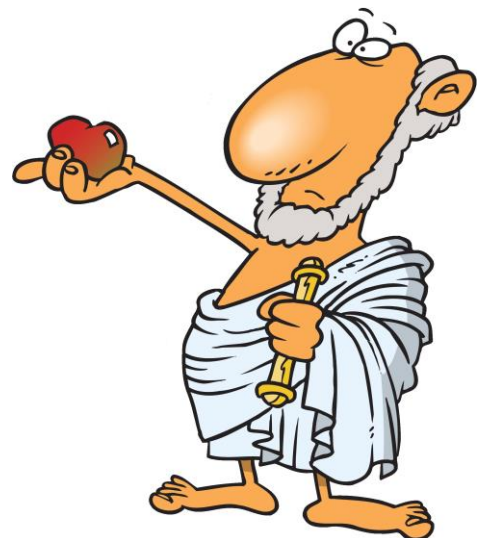
Have you ever wondered why we often write and talk about the human heart as if it were an emotional being with a distinct personality? We boast that we know the words of a song by heart, suggesting that it has mental abilities. We find it in our heart to help someone in need, indicating that it has the capacity to care about another. Every February 14th, we jump headlong into the hearts-and-flowers frenzy of Valentine's Day, showering our sweethearts with gifts of love from the bottom of our hearts.

What's going on here? It seems we sometimes completely forget that the major function of this hard-working organ is to pump blood. How did we get science and sentiment so tangled up?

The ancient Egyptians started the muddle around 3,100 BCE. Their intelligence and accomplishments have astounded us for centuries. However, without modern science and technology at their disposal, it was inevitable that they would sometimes miss the mark. While they were building pyramids, for instance, they were forming incorrect ideas about the human heart.

To them, the heart was the body's physical, mental, and spiritual command center. It generated knowledge, memories, emotions, and good health. They were convinced that part of the soul lived in it and the gods used it to speak to people. Anything so important was necessary for a successful afterlife, so the heart was the only organ they left inside their mummies. As for the brain, they cracked open the nose and then used iron hooks to yank out most of it. They scooped up the left-overs with a long spoon. Of course, they threw the whole mess away. After all, the brain did nothing but supply mucus to the nose, and the person wouldn't need that in the spirit world.

(Full text is three pages.)



[Image: A Ron Leishman Cartoon](#)

Questions

Getting to the Heart of the Matter

Directions: Refer to the text to answer the following questions.

- _____ 1. The *main idea* of *Getting to the Heart of the Matter* is
- (A) why we speak of the heart as if it possesses intelligence and emotion.
 - (B) why we celebrate Valentines Day with heart symbols that represent love.
 - (C) how medical science made mistakes about the heart.
 - (D) how circulation was discovered.
- _____ 2. Which of the following quotes from the text is **not** one of important facts that supports the text's main idea?
- (A) *The Egyptians believed that the heart was the very core of human personality and spirit.*
 - (B) *Famous Greek philosopher Aristotle (384-322 BCE) gave it a push forward by declaring the heart to be the seat of human intelligence, motion, emotion, body heat, and sensations.*
 - (C) *Had it not been against Roman law to dissect human corpses, perhaps he (Galen) could have moved closer to the truth.*
 - (D) *Language is not scientific. We bend it and twist it and reshape it to suit our needs.*
3. What facts prove that the Egyptians revered the heart but not the brain.

(Full file contains 15 questions for *Getting to the Heart of the Matter*.)

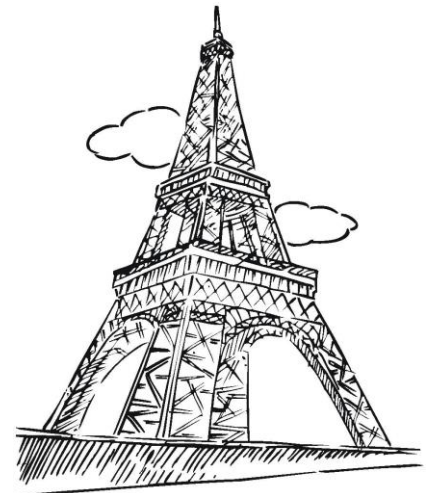
The Engineer with Wheels in His Head

by Margaret Whisnant

Everyone knows that February 14th is Valentine's Day. However, it also commemorates the birthday of a young American engineer who was once scolded for having "wheels in his head."

The whole thing started more than a 120 years ago when architect Daniel H. Burnham, designer of the first U.S. skyscrapers, stood before a special gathering of architects and engineers. Congress had declared that a great celebration would take place in Chicago to commemorate the 400th anniversary of Columbus's historic landing. As Construction Chief of the World's Columbian Exposition Corporation, Mr. Burnham had to fill the 1893 event (also known as the Chicago World's Fair) with cutting-edge buildings and structures. His main concern that day in 1891 was to get America's best civil engineers involved.

America's architects, he told his audience, had already distinguished themselves by designing and constructing colossal buildings that towered to the skies. The country's civil engineers, on the other hand, had done little to stretch the possibilities of their craft. He challenged them to create a grand structure to serve as the main attraction for the 1893 Exposition. It should surpass the 984 foot Eiffel Tower that had been built as the centerpiece for the 1889 Paris Exposition.



Right away someone proposed a second tower 500 feet higher than Eiffel's, but it was quickly rejected. The Chicago Exposition needed something new and daring to showcase American engineering skills.

Thirty-two-year old civil engineer George Washington Gale Ferris, Jr. listened with great interest. As the senior partner in a firm that built steel bridges and the founder of one of the first companies to test and inspect metals used in railroad and bridge building, he had the required qualifications. Furthermore, he had left his home in Pittsburg and come to Chicago intending to take on the challenge.

(This article is three full pages.)

Questions

The Engineer with Wheels in His Head

Directions: Refer to the text to answer the following questions.

- _____ 1. The article is about
 - (A) the life and work of George Ferris.
 - (B) the Chicago World's Fair of 1893 and the St. Louis Fair of 1904.
 - (C) the world's first Ferris wheel.
 - (D) fairs and amusement parks.

- _____ 2. February 14th is Ferris Wheel Day because
 - (A) Ferris wheels are often associated with romance.
 - (B) it's George Ferris's birthday.
 - (C) it marks the completion of the great Chicago wheel.
 - (D) the first Ferris wheel looked like a giant heart.

- _____ 3. Which of the following would be the *best* alternative title for this text?
 - (A) The Great Chicago Wheel
 - (B) The Story of a World's Fair
 - (C) An American Challenge
 - (D) The Age of Giant Wheels

4. Explain how the world's first Ferris wheel is connected to the Eiffel Tower in Paris, France.

(Complete product has 15 CCSS aligned questions for *The Engineer with Wheels in His Head*.)

Answer Keys

(Samples. . .)

Getting to the Heart of the Matter

1. A (RI. 6.2, 7.2, 8.2)
2. C (RI. 6.2, 7.2, 8.2)
3. The Egyptians thought the heart was the home for part of the soul, so it would be needed in the afterlife. It was the only organ they left inside their mummies. They demonstrated their low opinion of the brain, which they thought did nothing by product mucus, by yanking it out through the nose with iron hooks and long spoons. (RI. 6.1, 7.1, 8.1)
4. (A) cooling
(B) thousand
(C) romantic
(D) God
(E) Leonardo da Vinci
(F) saw
(RI. 6.1, 7.1, 8.1)

e-Bibliography

Getting to the Heart of the Matter

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Tour.Egypt.net—The Ancient Egyptian Heart
Wikipedia The Heart Symbol
PBS.org—Timeline: Heart in History
UChicago.edu—The Book of the Heart
ScienceWorld.Wolfram.com—William Harvey

The Engineer with Wheels in His Head

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Web.Bryant.edu: The History of the Ferris Wheel—a Timeline
Wikipedia: [George Washington Ferris, Jr.](http://Wikipedia)
Wikipedia: Ferris Wheel
Web.MIT.edu—Inventor of the Week—George Ferris

Idea: This Valentine's Day, challenge your students to design a card that features hearts and a Ferris wheel.

Clipart Credits

[Ron Leishman Cartoons](http://RonLeishmanCartoons) (pages 1, 2, and 3)
Fotolia (page 10)