

# Informational Reading Article

Blind Man Sees for First Time with "Bionic Eye" (1330L)

**Instructions: COMPLETE ALL QUESTIONS AND MARGIN NOTES using the CLOSE reading strategies practiced in class. This requires reading of the article three times.**

**Step 1: Skim** the article using these symbols as you read:

(+) agree, (-) disagree, (\*) important, (!) surprising, (?) wondering

**Step 2: Number** the paragraphs. **Read** the article **carefully** and **make notes in the margin**.

Notes should include:

- Comments that show that you **understand** the article. (A summary or statement of the main idea of important sections may serve this purpose.)
- Questions you have that show what you are **wondering** about as you read.
- Notes that differentiate between **fact** and **opinion**.
- Observations about how the **writer's strategies** (organization, word choice, perspective, support) and choices affect the article.

**Step 3: A final quick read** noting anything you may have missed during the first two reads.

Your **margin notes** are part of your score for this assessment. Answer the questions carefully in **complete sentences** unless otherwise instructed.

Student \_\_\_\_\_ Class Period \_\_\_\_\_

## Blind Man Sees for First Time with "Bionic Eye"

It seems like the stuff of science fiction. But for Larry Hester, this is an eye-opening change for the rest of his life. Hester, who is 66 years old, lost his sight more than 30 years ago as a result of a degenerative disease called retinitis pigmentosa. At the time when his vision began to deteriorate, there were no known treatments or cures for the disease.

As a result, he's spent much of his adult life living in complete darkness -- but not anymore. On Oct. 1, Hester became the seventh person in the U.S. to receive an implantable Argus II Retinal Prosthesis Device, also known as the bionic eye. The U.S. Food and Drug Administration approved the device in February 2013 for people with rare, degenerative eye diseases.

The device doesn't restore Hester's sight in the traditional sense, but in conjunction with specially-equipped glasses, allows him to see light, meaning he can make out contours and silhouettes of objects. Hester is now not only able to navigate a room and find a door with more ease, but shortly after receiving the device he reported "seeing" a white duck swimming in a pond, the harvest moon, and his wife's yellow chrysanthemums.

Firger, J. Blind man sees for first time with "bionic eye". CBS News October 15, 2014.

*Notes on my thoughts,  
reactions and questions as I*

*read: **Must do 3***

"The light is so basic and probably wouldn't have significance for anybody else, but to me it's meaning I can see light and we can go from here," Hester said shortly after trying out his new glasses for the first time.

In September, Dr. Paul Hahn, an eye surgeon at Duke University, implanted an electronic stimulator in Hester's left eye. He then connected it to the camera affixed to special glasses.

"Turning this device on allows him to experience a whole new world," said Hahn. "It's not vision as we traditionally know it; it's a whole new type of vision for him."

Patrick Finnerty of Second Sight Medical Products helped to develop the device, and said the glasses provide a "pixilated type of vision." "The patient essentially has to try to determine what those flashes of light mean, and in many cases it can help them determine where a window is, light coming in through the window or where a doorway is, essentially help them navigate the world around them."

Hester will return regularly to the Duke Eye Center for additional training, and also hopes to be actively involved in enhancing the technology by providing his doctors with feedback as he becomes more skilled at navigating life with his new glasses.

"I think this represents a new generation of medicine where rather than just treating or just watching patients lose vision or trying to stabilize his vision for the first time, we can artificially restore vision. I think this opens the door to a whole new generation or era of medicine, which is almost like science fiction," said Hahn.

Visit CBS News at <http://www.cbsnews.com/news/blind-man-sees-for-first-time-with-bionic-eye/> to watch the video of the moment Hester tries his glasses for the first time.

**Comprehension questions – answers may be in phrases.**

1. *What disease is to blame for Hester's loss of sight?*
2. *What is meant when a device is implantable?*
3. *Define science fiction as used in the article.*
4. *At what rate was Hester's eyesight lost? (i.e. Did he lose it all at once or at some other rate?)*
5. *Define pixilated as used in the text.*

7/8.RI.4,5,6

**2. Answer each question in one or more complete sentences.**

Why is the term "seeing" used with quotations in paragraph three?

*Describe the type of vision Hester has with the implant and glasses.*

Explain the phrase "opens the door" as used in the final paragraph.

7/8.RI.5,6

3. List three options that medical professionals have when it comes to eye care and degenerative diseases prior to this new " bionic eye" ? How will the bionic eye and glasses change this thought process? Be specific and cite from the text to support your answer.

7/8.RI.1.9

4. Based solely on the information presented in the text, make a claim as to whether or not the " bionic eye" is ready to be marketed to patients across the country? Use details and examples from the text as well as inferences to support your claim in a well-developed paragraph.

7/8.RI.1.8