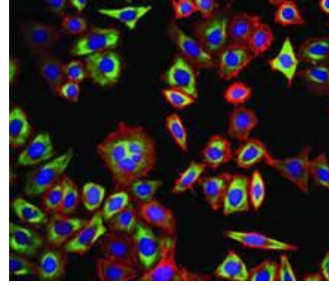




## THE IMMORTAL LIFE OF HENRIETTA LACKS WEBQUEST

A descendent of freed slaves, Henrietta Lacks was an African American tobacco farmer who got cervical cancer when she was 30. A doctor at Johns Hopkins took a piece of her tumor and put it in a test tube without her consent or knowledge and, although she died 8 months later, her cells-known worldwide as HeLa cells-are still alive today. This is her story...



**YOUR ASSIGNMENT:** Complete the webquest and answer the questions on the answer sheet. Print it and be prepared to turn it in.

### A. ACTIVITY 1

Watch the first 10 minutes of the documentary “Way of All Flesh” about Henrietta Lacks:

<http://topdocumentaryfilms.com/the-way-of-all-flesh/>

1. How old are Henrietta Lacks’ cells now, as of 2013?
2. What race(s) were Henrietta’s great grandmother and great grandfather?
3. What did Dr. Grey feed cancer cells to try to keep them alive?
4. What happened when Mary Kubicek plated out Henrietta’s tumor cells that was unusual?
5. Why did Dr. Grey give HeLa cells a code name?

### B. ACTIVITY 2

Go to the Wikipedia page about Henrietta Lacks:

[http://en.wikipedia.org/wiki/Henrietta\\_Lacks](http://en.wikipedia.org/wiki/Henrietta_Lacks)

6. Why did Henrietta Lacks have no choice but to go to Johns Hopkins hospital?
7. Henrietta Lack’s grave was unmarked for years, but in 2010, who provided a headstone for her and what inspired him to do so?
8. Finish this line from her headstone: “Her immortal cells...”

### C. ACTIVITY 3

Read this interview with Rebecca Skloot, the author of *The Immortal Life of Henrietta Lacks*.

<http://www.smithsonianmag.com/science-nature/Henrietta-Lacks-Immortal-Cells.html>

9. Henrietta’s husband got a call that he interpreted as “We’ve got your wife. She’s alive in a laboratory. We’ve been doing research on her for the last 25 years. And now we have to test your kids to see if they have cancer.” What was the real purpose of the call?
10. Henrietta’s family lived in poverty and many couldn’t afford health insurance. What did her brothers do when they found out that HeLa cells were being bought and sold?

#### **D. ACTIVITY 4**

Read the front page of this website:

<http://henrietalacksfoundation.org/>

11. What is the purpose of the foundation and what have they accomplished so far?

#### **E. ACTIVITY 5**

Watch the first minute of this bioethicist interview about Henrietta Lacks:

<https://www.youtube.com/watch?v=x21YtrY9f0Y>

12. Was it illegal for doctors to take cells from Henrietta without her consent?
13. Was it right to take them?

#### **F. ACTIVITY 6**

Read this blog post:

<http://scienceblogs.com/whitecoatunderground/2010/01/18/consent/>

14. What is the main difference between the consent form signed by Henrietta Lacks in 1951 and the one she would sign today?

#### **G. ACTIVITY 7**

Listen to the song “Helen Lane” by Mal Webb

<http://www.youtube.com/watch?v=s-Bb4dmpKeE>

15. At what minute in the song does the singer use “Helen Lane’s” real name?
16. Why is the song called “Helen Lane”?

#### **H. ACTIVITY 8**

Check out this infographic at:

[http://www.wired.com/magazine/2010/01/st\\_henrietta](http://www.wired.com/magazine/2010/01/st_henrietta)

17. Approximately how many scientific papers do HeLa cells appear in?
18. In what year did a Yale researcher publish a discovery that cancerous HeLa cells contain enzyme that prevents cells from dying, i.e., makes them immortal?
19. Do cancer cells grow faster or slower in space?
20. How did HeLa cells make it possible to diagnose trisomies like Down syndrome?