

**Double Helix** by Nancy Werlin

Critical Thinking Questions (by Dr. Joni Richards Bodart & Nancy Werlin)

**Pre-Reading questions**

A-What is your opinion on genetically modifying humans before reading this book?

B-What do you know about genetics before reading this book?

**Questions**

1-What are ethics?

2-Describe what it means if something is transgenic? What does GMO stand for?

3-Both Kayla and Eli are gifted athletes, extremely intelligent, and unusually attractive. Discuss some of the reasons why they might share these characteristics.

4-Compare and contrast Dr. Wyatt's and Dr. Fukuyama's philosophies about genetic engineering, explaining which perspective makes more sense to you.

5-After spending time with Wyatt and Kayla, Eli is unable to reconnect with Viv. Explain your perception of his state of mind at that point and why he reacted in the way that he did.

6-Kayla grew up with knowledge about herself that Eli's parents kept from him. Discuss how you think having that knowledge affected her life and her relationships with Wyatt and Eli.

7-Compare and contrast Quincy Wyatt and Jonathan Samuels, discussing their philosophies of life, their ethics, and their relationships with Eli.

8-The people in this book all believe that at one time or another their actions are moral and ethical. Choose the persons who you think were the most and least morally and ethically correct or appropriate, and explain why you chose them.

9-What is genetic engineering? Research 2 techniques of genetic engineering and write a 1-3 paragraph overview of each technique. Please cite any sources that you use.

10-Eli's mother has Huntington's Disease. What is it? How is it passed on/what type of inheritance is involved? What were Eli's chances of having the disease had Dr. Wyatt not intervened? Where is the gene located for the disease?

11-Does the United States have any regulations in place regarding genetic engineering/cloning of humans? If so, what are they? If not, do you think there should be and why?

12-What is a chimera in the world of genetic engineering?

**Post-reading question**

C-What is your opinion of genetically modifying organisms after reading the book and researching the questions? Is it the same or has it changed at all?