

Name: \_\_\_\_\_

*Teacher Notes: The stories can be printed out prior to class. Each group can be assigned one story to discuss. It is not necessary that group comes to a consensus on each question.*

## Bioethics - Your Genes, Your Choices

<http://ehweb.aasas.org/ehr/books/contents.html>

**Instructions:** Each chapter describes a scenario where a decision must be made about a medical treatment. Read the scenarios and think about the problem. As a group, read the scenario you are assigned and discuss the answers to the questions. Your teacher will assign you 1-2 chapters for your group to read. At the end, your group will share your story with the rest of the class.

### Chapter 1 - Martin Needs Medical Treatment (or does he?)

1. What is wrong with Martin?
2. Do you think that Martin should have genetic treatment (if it were possible) to correct his problem? Why or why not?
3. Do you think Martin should avoid having children in order to not pass along his condition? Why or why not?
4. What is the difference between ethical, legal, and social issues?

### 5. Chapter Vocabulary (Define these words)

albino

genetics

pigment

gene

### Chapter 2 - Priya Should Find Out If She Has Inherited a Fatal Disease (or should she?)

6. Describe the disease Priya's mother had?
7. If you were Priya, would you get tested for this disease? Why or Why not?
8. If Priya is tested and found to have the gene for the disease, who else has a right to know? (her family, her employers, her boyfriend...) Explain your answer.
9. What are the pros (good points) and cons (bad points) of having this genetic test performed?

### 10. Chapter Vocabulary

genetic counseling

mutation

Human Genome Project

disorder



### Chapter 3 - Howard's Health Is Up to Him (or is it?)

11. What did the doctor tell Howard?

<https://www.biologycorner.com/worksheets/bioethicsgenes.html>

12. Why is it that some people who have the gene for a disease, never actually get the disease. List three possibilities in your answer.

13. How can creating a genetic profile be helpful to a person?

14. If the genes are found that cause "criminal behavior", should the police be informed of those people that have those genes so they can keep an eye on them? Defend your answer.

### 15. Chapter Vocabulary (define)

genetic expression

genetic determinism

behavioral genetics



### Chapter 4 - Carlos and Mollie Can Have a Perfectly Healthy Baby (or can they?)

16. If you were Mollie, would you have the test to determine if you were a carrier for cystic fibrosis?

17. What are the symptoms of the disease?

18. How can reproductive technology increase a couple's chances of having a healthy child?

19. If Mollie is tested and found to be a carrier for the disease, do you think the couple should still try to have a child? Why or why not?

20. If the couple conceives, and a genetic test confirms that the fetus will have the disease, should the pregnancy be terminated? Explain your reasons.

21. How can ex utero genetic testing help Carlos and Mollie have a healthy child?

22. It is possible that in the future, genetic testing on a fetus could be done to determine other traits, like eye color, intelligence, or even probability of obesity or alcoholism. What do you think about this? Would you have your baby tested before it was born? Why or Why not?

### 23. (Vocabulary) What is a DNA Marker?

### Chapter 5 - Donita Should Cooperate with the Police (or should she?)

24. If you were Donita, would you submit saliva and hair samples to the police to help find the murderer? Why or Why not?

25. List 3 ways in which DNA fingerprints have been used:

26. Why might someone object to submitting a DNA sample, even if they weren't guilty of the crime?

27. Why might courts throw out this evidence if the mass DNA screening leads to the arrest of a murder suspect?

28. Does a DNA test violate a person's privacy? Who should be responsible for storing information about a person's DNA?

### Chapter 6 - John and Elsa Will Profit from Biotech Farming (or will they?)

29. If you were Elsa and John, would you use the hormone on the cows? Why or why not?

30. What kinds of things are being produced by biotech labs? (List at least 3)

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31. Why do animal rights activists object to using BGH on cows?
32. Why would some people think that biotech engineers are "playing God"? Do you think this is true?



33. Chapter Vocabulary (define)

- genetic engineering
- selective breeding
- transgenic

Chapter 7 - Dr. Lu's Patients Have the Right to Be Tall (or do they?)

34. Why would Dr Lu feel that one Rico and Tim should be treated differently?
35. Do you think both boys should receive the hormone or just one (or even neither)? Defend your position.
36. Why is the term "eugenics" controversial?
37. Chapter vocabulary (define)
- gene therapy
  - germ-line therapy

