

APES: Harvest of Fear

Name: _____

Part I: Introduction

1: Who are the **ELF**? *What are they against?*

2: *Which crop* was the catalyst to the GMO food industry?

3: What is “*the gene gun*”? *How does it work?*

Part 2: BT

4: *Which university* was the 1st to try GMO foods?

5: What were some of the *first ideas* for GMO’s?

6: Who are **Monsanto**? What did they “*set out*” to do?

7: What is a big risk for corn crops? *What is the problem with spraying with pesticides?*

8: What is **BT**? *What does it do?*

9: Why was **genetically engineering** considered to be a saver of the environment?

10: When did GM foods get into the widespread media?

Part III: The Anti-GM Movement

11: What did the **European Union** vote for?

12: What did the **University of New Mexico** researchers find out from surveys and focus groups?

13: What is your opinion on GMO's? (*Before watching the video?*)

14: Can someone "*prove*" that GM foods are safe?

15: How are GM foods tested for safety?

16: How does Monsanto test their GM foods at the *molecular level*?

17: What does the USDA, FDA and EPA do for GM foods?

USDA:

FDA:

EPA:

Part IV: Allergies

18: Why are people concerned about allergies with GM crops?

19: Why should people have confidence in GM foods?

20: What do the “*Union of Concerned Scientists*” believe should be done?

21: What happened to “*Starlink Corn*”? Explain the events and consequences.

22: Describe the meaning of the statement, “*The absence of evidence isn’t the absence of harm.*”

Part V: GM History

23: How did humans get **different types** of fruits and vegetables?

24: What are some of the **risks of natural breeding** of fruits and vegetables?

25: What is the *difference between “classic” breeding and genetic engineering?*

26: *Do you believe* that a single gene in a new species would change the species as a whole?

27: Monsanto holds _____ % of U.S. agricultural patents.

Part VI: GMO’s and the Environment

28: Monarch Butterflies love to eat _____

29: What did the scientists find out about the *BT Corn and Monarch Butterfly Caterpillars*?

Part VII: GMO's and Consumers

30: What is the difference between BT Corn Pollen *in the lab and in the field*?

31: *Why is it so hard* to know if BT Corn Pollen is harmful to Monarch Butterflies in the field?

32: *If you had the choice* between BT Corn and spraying with insecticide- *which would you choose and why?*

33: What does it mean when food is "*organically grown*"?

34: What are the fears of using *BT Corn over time*?

Part VIII: Pesticide Resistance & Feeding the World

35: What has the EPA mandated against the pesticide resistance? *How should this help?*

36: Why is it hard to "*guarantee*" that foods are GM free?

37: What is **subsistence agriculture**?

38: *Why* did Monsanto invest in the sweet potato for Africa? *What were the results?*

Part VIII: Feeding the World

39: What is one of the biggest problems with soil in farming in parts of Mexico?

40: *Why do people resist* the idea of helping people with GM foods?

Part X: Success and Challenges

41: *How much money* did Monsanto donate toward the world agriculture project?

42: *What other actions* have the ELF taken?

43: The genetic Salmon have been engineered to grow ____ x larger than regular Salmon.

44: What is *special* about the transgenic Salmon?

45: What is the “*good genes hypothesis*”?

Part XI: Population Problems

46: *What did the model tell us* about what would happen if the transgenic fish “escaped” and ended up mating with regular fish?

47: What *other GM products* are in development? **Explain the plans for bananas.**

48: What is “*golden rice*” and how it is helpful? **Explain.**

Part VII: The Future of GM Products

49: Why are biotech companies worried about “*labeling*” GM products?

50: Why do labels reduce American’s fear of GM food?

November 2012- California voters rejected Prop 37, which would have required retailers and food companies to label products made with genetically modified ingredients.

51: In spite of the fact that people in focus groups stated that they would rather see GM foods labeled, proposition 37 was rejected by Californians in November 2012. Voters were concerned about the increased costs of products that would be forced to be labeled. *What is your opinion of labeling?*

Conclusion: *Write a 5-paragraph persuasive essay (for OR against) on one of the following topics: (see persuasive essay format)*

- * The use of GM food products
- * The use of labeling for GM products
- * The use of GM engineering for other products (vaccines, etc.)
- * Other topic- *please get approval prior*