

Names: _____

Bio 105: Artificial Selection, Natural Selection, and Biotechnology

Watch the video “Foods that Originally Looked Totally Different”

(<https://youtu.be/M5Qly-VQfbo>)

1. What is selective breeding and how is it accomplished?

2. What trait or traits were selected for in the following agriculture examples?
 - a. Corn

 - b. Avocado

 - c. Peach

 - d. Eggplant

 - e. Strawberry

 - f. Tomato

 - g. Carrot

 - h. Cucumber

 - i. Banana

 - j. Watermelon

3. If the fruits and vegetables described in the video grew without any humans performing selective breeding, do you think they would show the same traits? Explain why or why not.

Watch the video “We Need to Talk About Bananas”

(<https://youtu.be/6180deSVS7U>)

4. What traits make the Cavendish banana appealing to use commercially?
5. What are the consequences of having decreased genetic variety in the banana population?
6. Why aren't Gros Michel bananas used commercially today?
7. How could scientists help prevent bananas from dying of Panama disease?

Watch the video “Hawaii GMO Papaya” (https://youtu.be/V3xCmfnAV_4)

8. What do you think the term GMO means?
9. How did the tools of genetic engineering and biotechnology help Hawaiian farmers in the 1990s?
10. Based on the video or your own experiences:
 - a. What are some arguments that are brought up by those in favor of GMOs?
 - b. What are some arguments that are brought up by those against the use of GMOs?