BI 101

The Botany of Desire Video Guide

**Answer the following questions as you view first two segments of the film (~the first 60 minutes):**

**Apples:**

1. What part of the world did the apple originate?
2. Explain the evolutionary connection that humans have to sweet tasting foods. Why did our ancestors prefer sweet foods?
3. What non-human animal plays a part in apple dispersal?
4. Who was the Johnny Appleseed legend based on?

When was he born?

Where did he actually travel in the U.S.?

1. What is unusual about apple seeds found in the same apple?
2. Explain the concept of grafting.
3. Why did the early colonists prefer to drink hard apple cider?
4. What is a monoculture?
5. Why is reduced variety in genetic stock a problem for a crop like apples?
6. In Geneva NY there is a special apple research center, what is the mission of this facility?
7. Is there benefit to growing non-edible varieties of apples? Explain.

**Tulips:**

1. Why is there so much variety in the tulip?
2. Angiosperms are considered especially successful, why is this?
3. Where do scientists think that tulips originated?
4. What country/culture perfected the brilliance of the tulips?
5. In the early 17th century which country invested heavily in this flower in a speculative fashion?
6. What are broken tulips? Describe:
7. At the height of the tulip mania a single tulip bulb could have purchased a:
8. Why do you think that the Dutch blamed this plant for the financial crisis?
9. What caused the broken tulip appearance?
10. Explain how new varieties of tulips are created. Describe the types of experimentation that goes into this horticultural technique.
11. Why does it take incredible patience to be a flower breeder?
12. The Kukkenhoff gardens near Amsterdam are some of the most famous in the world. Why do enthusiasts flock to this specific garden?
13. How do flowers perhaps influence human culture and trade? How do they benefit from human actions/obsessions?

**After viewing the film, answer the following questions:**

1. Michael Pollan takes a unique view of the plant kingdom, asking us to view the relationships we have with plants from the plant’s point of view. Discuss some ways that this video inspired you to view the plant kingdom. What were some particularly interesting things you learned about the plant kingdom that you did not know before viewing this film?
2. Explain, in your own words, the some of the dangers that can arise from using monocultures in our agricultural system and food supply lines.
3. In each video segment, Michael Pollan relates each species to a specific human desire. For each plant addressed in the first two segments, discuss how our relationship drove the evolution of that species.
4. There are 2 more segments in this film, however, (unfortunately), there are limited connections we can make to these segments in our curriculum. But you are encouraged to watch them nonetheless, if you found this film interesting. Come on, ya know you want to!