**The Botany of Desire** *A documentary on plant evolution and their relationships with the human species.*

*PBS with Michael Pollan*

**Introduction**

Summarize what Michael Pollan is talking about during the introduction. (Include something about the desires of both plants and humans.)

**The Apple (Sweetness)**

Where is the native home of an apple tree?

What was the apple’s evolutionary strategy to get it from where it started to where it is now?

Finish this sentence. “The desire for sweetness is….

How did the apples get out of the Kazakhstan forest?

Who was the real person of whom the legend of Johnny Appleseed is based on? What did he do?

Why were people in the early Americas required to plant fruit trees?

Why wouldn’t you want to plant an apple tree from seed?

How can you get a tree that produces an exact copy of an apple that you like?

What did the settlers use the sour or bad apples for?

What was the problem with “freezing the evolution” of apples?

How are most apples protected from insects and diseases?

What is the “Kazakhstan recreated”? Where is it? What is its purpose?

What is the problem with monocultures?

**The Tulip (Beauty)**

How do a bee and a human have similar ideas of beauty?

Which culture is infamous for their relationship with the tulip?

What is special about angiosperms?

Why was the presence of a flower a successful evolutionary strategy?

Where did the tulip originate?

What was “tulip mania”?

What is a broken tulip? How does this happen? Why was it special?

Why does Michael Pollan say that the tulip breeders are “sex crazy”?

Why are the tulip breeders picking the flowers off the tulip plants?

What does Michael Pollan say is the greatest threat to a flowers survival from a plants point of view? How do they prevent this from happening?

**Cannabis (Intoxication)**

Besides beauty and sweetness, what is one thing that plants cash in on to appeal to humans?

How many arrests are made each year for cannabis possession?

Which culture is the only one not known for having a native plant intoxicant? Why?

Where was cannabis first discovered?

What did Mexico do to their cannabis plants in the 1970’s on request of the US government? What was the consequence of this action for the US?

How did the plant evolve to be grown indoors?

What parts of the brain are influenced by THC?

What is the actual purpose of the receptors that are affected by THC?

Why is forgetting an important part of our brain and memory?

Why does Michael Pollan say plants are just as advanced evolutionarily as humans are?

**Potato (Control)**

What are we controlling when we plant potatoes?

What is the quantum change in our relationship with plants described about the potato?

What causes a potato to turn green? Why shouldn’t you eat a green potato?

Where did the modern potato originate?

Explain the change the introduction of the potato caused in Europe.

What was the problem that occurred with Ireland planting only the “lumper” variety of potato?

What modern thing is making us forget about the problems with monocultures and the benefits of biodiversity?

Consumers are currently demanding which variety of potato?

What did Monsanto come up with to deal with the Colorado Potato Beetle?

What was the fate of the New Leaf Potato?

What is Michael Pollan’s solution to solving the problem with monocultures?

What does Michael Pollan say will win over the logic of capitalism, efficiency, or human designs?

**Conclusion:**

What is the most important lesson to take away from these 4 tales?

What does Michael Pollan mean when he says humans are casting “evolutionary votes”?