

The Real *Beauty and the Beast*

Name: _____

Period: _____

1. In the year 1547 what was the dominant world power, especially in countries like France?
2. Why did the French court believe that the boy was a “wild man” or “monster”?
3. Why was the “wild man” chained and caged?
4. What was the child’s name?
5. What is the name of the disorder that causes an overproduction of hair?
6. How many people in the world are affected by this disorder?
7. What new name was given to Pedro?
8. If Larry’s brother and older cousin also have the disorder, what does that mean about the disorder? (is it a **mutation or inherited**)
9. Were Pedro/Petrus and Larry treated similarly in their lives? How so?
10. How does Dr. Julie Anderson claim modern culture views people affected by disorders?
11. What had Petrus become through his education?
12. What qualities was Catherine di Medici searching for in a wife for Petrus?
13. Why is it better for Dr. Pragna Patel and her team to have a large family to study?
14. According to the pedigree of Larry’s family:
 - a. Which of his parents was affected by the disorder?
 - b. In which family member did the disorder originate?
 - c. What about this pedigree indicates that this is a sex-linked disorder?
 - d. If the pattern of inheritance of this disorder is x-linked dominant, what can be predicted about Larry’s offspring?
15. Why might this mutation be dominant instead of recessive?

16. Which chromosome holds the mutation in Larry's family?
17. Petrus and Catherine had both affected daughters and affected sons, what must be true about the pattern of inheritance in his family? (**is it sex-linked or autosomal**)
18. How many children did Petrus and Catherine have?
19. How many of their children were affected by the disorder?
20. If the karyotypes of Larry and Petrus were observed would they display aneuploidy?
21. Today it is understood that this disorder is a dominant disorder, what must have been the genotype of Pedro/Petrus?
22. His wife, Catherine, has a normal phenotype. What must her genotype be?
23. What was the probability that one of their offspring would inherit the disorder? Draw a Punnett square, if needed.
24. What was the probability that Petrus and Catherine would have 4 affected children and 3 unaffected children?
25. Petrus and Catherine's first two children, a son and a daughter, were both unaffected. They then had an affected daughter, then an affected son, followed by two more affected daughters. Their last child was an unaffected son. Draw a pedigree of Petrus, Catherine, and their children:
26. In addition to his unaffected son Larry Gomez also has a daughter, not mentioned in the documentary, who is affected by hypertrichosis. Larry's mother, grandmother, and great-grandmother were all affected. Draw a 5 generation pedigree of Larry's family (don't worry about including his brother, or cousins):