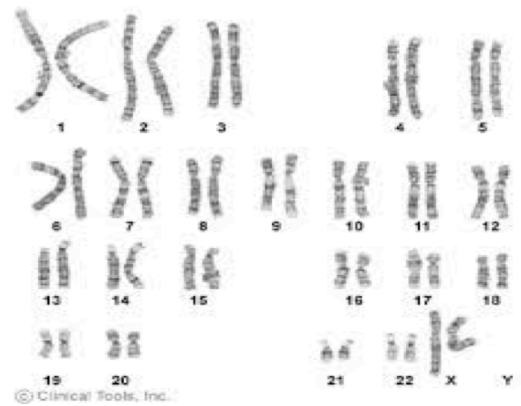


Genetic Disorder Research Assignment

Due: Next Week Friday

(40 point project)



Your fun-filled task is to research a human genetic disorder.

You may choose one of the following options for this assignment. Please sign up for your genetic disorder with Mrs. Ancheta before beginning your project.

Mrs. Ancheta before beginning your project.

Option 1: Letter to the parents (Individual)

You are a physician who has diagnosed a child with your disorder. Write a letter to the parents of the child and inform them of your diagnosis. Final version should be formatted as a formal letter.

Option 2: Foldable or Brochure (Individual)

Use your research to design an informational foldable or brochure on the disease. Your foldable should use simple language in your own words and include illustrations or pictures. Information can be listed in bullets or complete sentences.

Option 3: Videotaped News Story (Partners)

With a partner, write and film a news story educating your viewing audience about your disorder. You may format the story any way you wish as long as the required information is included.

Option 4: Other Ideas

Please let me know if you have other ways to display your research findings. For example you can write a non-fiction story with true to science facts or you can interview someone with the disorder (can be pretend). I know you have many creative ideas. Please share them with me.

For all options the following must be include (required information):

- 1) **Description:** Describe the disorder including symptoms. You must include graphics of the disorder (i.e. pictures of the patients with symptoms). Please discuss any alternative names for the disorder and explain how the name was chosen. Also discuss Who/when/where/how of the discovery of the disorder
- 2) **Mode of Inheritance:** Describe how the disorder is inherited (i.e. sex-linked recessive or autosomal dominant). You must include graphics representation of inheritance (i.e. karyotype, Punnett Square, pedigree, or location of gene on a chromosome)
- 3) **Diagnosis of Disease:** How is the disorder determined? Discuss the specific test used.
- 4) **Treatment & Prognosis:** List and discuss any possible treatments. How does the disorder impact the quality of life for the patient and his/her family members? What is the life expectancy?
- 5) **Frequency:** How frequently does this condition occur in the human population?

Bibliography: List websites or resources used. You may use either APA or MLA format if using written format. You need to have at least five sources.

Optional - Short Survey: Write two questions at the end of your project that will test the reader's knowledge of your genetic disorder.

Name: _____ Partner's name: _____ Period: _____

Genetic Disorder Research Project Rubric

Creativity/Neatness	Points	Completeness/Accuracy	Points
Project is uniquely different and clearly demonstrates individual creativity. The project is also neat and well put together; easy to read/understand. Extra effort is apparent.	___/5	All required information is present and is in full detail. All information is accurate. Additional facts are present.	___/40
Project is neat and well put together. Some creativity is demonstrated	___/4	One of the required information is missing, inaccurate or incomplete	___/35
The project looks a little sloppy but it is evident an effort was made.	___/3	Two of the required information is missing, inaccurate or incomplete	___/25
The project is sloppy; put together hastily.	___/2	Three of the required information is missing, inaccurate or incomplete	___/20
The project demonstrates lack of effort and detail.	___/1	Four of the required information is missing, inaccurate or incomplete	___/15

Note: If any part of the project is cut and paste (plagiarized) you will receive a zero for the assignment. Everything must be written in your own words. Please proofread before submitting your work. If you are doing a video, please send it to Mrs. Ancheta's email amy_ancheta@baldwin.k12.hi.us. I look forward to some amazing projects. Good luck!

Bibliography (5points) – one point for each of the valid sources. _____/5

Total points earned _____/50

Additional Comments:

List of possible disorders: (Sign up with Mrs. Ancheta)

1. Down's syndrome
2. Edwards Syndrome
3. Turner Syndrome
4. Extra X Chromosome
5. XYY syndrome
6. Klinefelter syndrome
7. Triplo-X females
8. Cri-du-chat syndrome
9. Patau syndrome
10. Alagille syndrome
11. 22q13.3 deletion syndrome
12. Prader-Willi syndrome 259
13. Angelman syndrome
14. Wolf Hirschhorn syndrome
15. Trisomy 16
16. Fragile X syndrome
17. Duchenne muscular dystrophy
18. Phenylketonuria (PKU)
19. Rubinstein-Taybi Syndrome
20. Aicardi Syndrome
21. Stickler/Marshall Syndromes (Very similar)
22. Bloom Syndrome
23. Ehlers-Danlos syndrome
24. Wiscott-Aldrich Syndrome
25. Albinism
26. Sickle cell anemia
27. Tay Sachs
28. Cystic Fibrosis
29. Huntington's Disease
30. Hemophilia

