Genetic Disorders

A genetic disorder is a disease caused by a different form of a gene called a variation, or an alteration of a gene called a mutation. Many diseases have a genetic aspect. Some, including many cancers, are caused by a mutation in a gene or group of genes in a person's cells. These mutations can occur randomly or because of an environmental exposure such as cigarette smoke. Still other genetic disorders are due to problems with the number of packages of genes called chromosomes. In Down syndrome, for example, there is an extra copy of chromosome 21.





Chose two of the following genetic disorders and answer the following questions. **IF YOU ARE WORKING BY YOURSELF, ONLY CHOOSE 1**

Turners Syndrome, Klinefelters Syndrome or Downs Syndrome

Describe non-disjunction and how it affects children with any of these disorders?

Answer the following statements for each of the two disorders you chose.

- What are some physical features of children/people with the disorder?
- What chromosome is affected?
- How is it treated/managed?
- What are the odds of getting the disorder?
- Is it possible to pass the disorder down to the next generation? Be sure to explain your answer.
- Include a picture of the karyotype for the disorder.
- Include a picture of a patient with the disorder.

Williams Pic

http://www.psychologytoday.com/files/u153/williamskid.jpg Info: http://www.nlm.nih.gov/medlineplus/geneticdisorders.html Girl: http://3.bp.blogspot.com/_JhKBxASbLWs/Rqdp8eysJ8I/AAAAAAAAABw/KNvP4bTQ0r0/s200/TS.gif