## **Genetic Disorder Research Project**

Name:	Partner's Name:

You are a genetic counselor. A genetic counselor's job is to guide expecting parents through the chances of have a child with a genetic disorder or birth defect and what to do if their child does have one. Your job is to inform a group of parents on the genetic disorder that you have picked. Below are all the criteria that you need to research and be able to present to the parents. You will be required to write an individual summary report of your findings along with a short partner presentation. Remember your audience are potential parents who do not have an extensive understanding of biology and genetics. Therefore, write and present your information, so the audience will understand.

You may work with a partner or by yourself for this project. If you choose to work with a partner, then both you and your partner must agree on one genetic disorder to sign-up for. Each group will get to pick a genetic disorder to research. A genetic disorder can only be used once in each class period. Therefore, make sure that you have backup options if your first choice gets taken. Everyone will sign-up for their genetic disorder and partner on FRIDAY, NOVEMBER 17TH.

## **Genetic Disorder Choices:**

Cystic Fibrosis Xeroderma Pigmentosum Turner Syndrome

Tay Sachs Duchenne Muscular Dystrophy Down Syndrome

PKU Huntington's Klinefelter's Syndrome

Albinism Marfan's

Sickle Cell Anemia Tuberous Sclerosis

Color Blindness Osteogenesis Perfecta

Hemophilia Dwarfism

What Information Do I Need To Find?	Which partner did this?
❖ Definition of the disorder	
<ul><li>What happens to the body?</li></ul>	
<ul><li>What parts of the body does it affect?</li></ul>	
Description of the symptoms	
<ul> <li>List all the possible effects on the body</li> </ul>	
❖ Cause of the disorder	
• What happens in the body to cause the disorder?	
<ul><li>Is it a mutation, deletion, nondisjunction, etc.?</li></ul>	
❖ How the disorder is inherited	
Is it sex-linked?	
<ul><li>Is it autosomal recessive or dominant?</li></ul>	
<ul><li>Is there a particular chromosome it is located on?</li></ul>	
❖ How the disorder is treated	
<ul><li>Medication? Gene Therapy?</li></ul>	
How the disorder is diagnosed	
<ul><li>What test are done?</li></ul>	
<ul><li>Is genetic counseling an option?</li></ul>	
How many and what type of people are likely to have the	
disorder?	
<ul><li>Is it more common in certain groups of people?</li></ul>	
<ul><li>How common is it?</li></ul>	
❖ Application of research article	
<ul> <li>What new research did you find involving your disorder?</li> </ul>	