

Name:

## Genetics Disorder Research Questions

### **Introduction**

Some disorders come from the environment. For example, diseases like the flu or AIDS are caused by viruses that a person may have become infected with. Other disorders are due to mistakes in the genes. A person is born with such disorders and the disorder is usually inherited from the parents.

### **Assignment Guidelines**

For this project you will research a genetic disorder from the list of possible topics below. There are many genetic disorders to choose from and you will only need to research one genetic disorder. If you would like to choose a genetic disorder not found on the list, be sure to ask your teacher before you begin your research. This is a multi-class project that involves researching a genetic disorder during Science class. If you have Mr. Bennett for Language Arts, then you will be continuing the project by writing a research paper based on your research. If this pertains to you then Mr. Bennett will be providing the guidelines for the research paper.

### **Possible Topics**

Albinism	Brachydactyly	Cat Cry Syndrome
Spinal Bifida	Cystic Fibrosis	Trisomy 21/ Down Syndrome
Edward's Syndrome	Duchenne Muscular Dystrophy	Hemophilia
Fragile X Syndrome	Ichthyosis	Ehler Danlos Syndrome
Marfan Syndrome	Klinefelter Syndrome	Multiple Sclerosis
Huntington's Chorea (Disease)	Patau Syndrome	Phenylketonuria
Tay Sachs Disease	Lesch Nyhan Syndrome	Polydactyly
Turner Syndrome	Prader Willi Syndrome	Achondroplasia
Bloom's Syndrome	Celiac Disease	Colorblindness
Fragile X	Hemochromatosis	Jacobsen Syndrome
Lou Gehrig's Disease	Marfan Syndrome	Neurofibromatosis
Phenylketonuria (PKU)	Sickle Cell Anemia	Other- Must Be Approved

**Research Questions:**

1. What is the full name of your genetic disorder?
2. What is the history behind your disorder?
3. How common is the disorder? How many people have it? How many get it each year (statistics)?
4. What are the specific symptoms of your assigned genetic disorder? Include all the major symptoms. Be sure to look up symptoms if you don't know what they mean.
5. When can doctors diagnose the disorder? (before birth? After birth? Adulthood) How do doctors diagnose the disorder? (What tests tell if you have it?)
6. How is the disorder inherited? Is it a dominant trait, a recessive trait, a problem with the number of chromosomes or something else? What causes the disorder? Explain fully.
7. What causes the disorder? Is it a gene or chromosome disorder?

<b>If it is a gene disorder:</b>	<b>If it is a chromosome disorder:</b>
What is the name of the gene that is causing the genetic disorder?	Which chromosome is causing the disorder?
What chromosome is this gene on?	How is the chromosome affected? (deletion, inversion, addition, etc.)

8. Is a particular population affected over another? (race, gender)
9. What is the treatment for this disorder? What symptoms do they help? If no treatment is available, what can be done for a person with this disorder?
10. What kind of medical needs/assistance will someone with the disorder need? How often will they need it?
11. Can this disorder be cured? Explain how it can or why it cannot be cured. What is the outcome for someone with the disorder?
12. What is the predicted outcome of the person with the disorder? How long is the average lifespan of

a person with this disorder (life expectancy)?

13. What have you learned personally from researching this disorder? Feel free to add any additional information that you found interesting when completing your research.

**References:**

All references must be cited below! Even if you just get 1 piece of info, it must be listed on this page!  
The following information is needed for all websites that need to be sited.

Last, F. M. (Year, Month Date Published). Article title. *Website Title*. Retrieved Month Date, Year, from URL.

<b>Source</b> Please list the full website. You must use reliable websites.	<b>Question Number Answered</b>

\*\*\*You will put your sources into APA format following the research phase of the project