AP Biology Genetic Disorder Project

Introduction:
Disorders or diseases manifest themselves in different ways, but for this project you will research a disorder that is genetic in origin and report your findings in a poster format.

Procedure:

1. Choose a genetic disorder from the list below. You may choose one that is not on the list with teacher approval. Only one group per class may sign up for a particular disease.

Hemophilia	Tay-Sachs disease	Turner syndrome
Sickle cell disease	Cri du chat	Color Blindness
Achondroplasia	Huntington's disease	Albinism
Fragile X Syndrome	Down syndrome	Phenylketoneuria (PKU)
Prader-Willi Syndrome/	Cystic Fibrosis	
Angelman syndrome	Klinefelter syndrome	

2. Verify your topic choice with your teacher.
3. Conduct research on your topic, using a minimum of three sources. Two must be reference books/textbooks.
4. Create a poster about your chosen genetic disorder that includes **AT LEAST** the following topics**. If there are other important issues or information associated with your chosen disorder that are not listed below include those as well.** Include at least three color pictures/diagrams on your poster to enhance understanding or to illustrate effects of the disorder.
   - What is the genotype of a person with this disorder?
   - What are the phenotypic effects of this disorder?
   - What is happening with the DNA and proteins produced to cause these phenotypic effects?
   - How is this disorder inherited?
   - Are there carrier forms and/or lethal forms of this disorder?
   - What types of tests are used to diagnose the disorder?
   - How can this disorder be treated?
   - What is the prognosis for a person with this disorder?
   - How many people are affected by this disorder? Does it affect any gender/population/ethnicity/race more than others?
5. Be sure the name of your disorder appears in large print on the top of your poster. Include the questions above as headings for each section on your poster. Paste the bibliography/works cited page to the back of the poster.
6. The poster should be free of spelling and grammatical errors and should be visually appealing and neat.