

Biology: GENETIC DISEASE REPORT

PURPOSE: You and a partner will research one **genetic disease/disorder** that occurs in humans. Together you will prepare a short Power Point/Google presentation about your selected disease and present it to the class. A variety of diseases are listed below.

DUE DATES: The Power Point presentation must be “turned in” to the teacher’s drop box (see process below) by **Wednesday, January 19th by 8:15am.**

POWER POINT GUIDLINES:

You will prepare **10-12 power point/Google presentation slides** about your selected disease. Remember to use the slides only as a **summary** of the important information, rather than a full explanation. Less is more! **DO NOT COPY information onto the slide.** This is plagiarism and could result in serious consequences. Use the slides as notes to help you present your information. If you are unfamiliar with Power Point utilize other students, teachers and online resources to help you with your presentation. **Have fun and be CREATIVE!**

SOURCES OF INFORMATION:

You need to consult a minimum of **three different resource** formats including at least **ONE PRINT SOURCE (book), one ONLINE DATABASE SOURCE and one WEB PAGE SOURCE.** Sources you might use include library databases, electronic encyclopedias, Internet, pamphlet files, the Reader’s Guide to Periodic Literature, electronic magazine guides, hard cover texts, books, or medical encyclopedias, etc. Ask the librarian if you need help finding a variety of sources.

REQUIRED INFORMATION:

The following **must be included** in your report: (You do not have to include the information in the exact order listed below, this is just a suggestion)

1. *What causes this disease?*
 - a. Type of mutation and specific chromosome, if known
 - b. Method of inheritance (i.e. sex-linked, autosomal, dominant, recessive, etc.)
 - c. How common is the disease? Is it more common in certain populations? Certain genders? Race? Region? Why?
2. *Phenotype*
 - a. Name all major symptoms associated with this disease
 - b. Life expectancy
 - c. Quality of life
3. *History of the disease*
 - a. When was this condition first identified and by whom?
 - b. Early treatments? Failures or successes?
4. *Present status of the disease*
 - a. Are people aware of the disease? Has this awareness changed since the initial discovery of the disease?
 - b. What treatments are currently available?
 - c. Potential for future treatments? (Gene therapy? Stem cells?)
5. *Bibliography (MLA format) (Ask the librarian if you need help!) – This does not count as a slide but should be included at the end of the presentation.*

ORAL

PRESENTATION: Students will be expected to make a quality formal presentation. What does this mean? (Good question.) ☺

*IT MUST BE WITHIN 5-7 MINTUES or you lose points! Practice this!

*Speaking the information, not reading it.

*Dressing appropriately: slacks, nice shirts, etc.

*Standing tall and confidently

*Loud, confident voice that everyone in the room can hear and understand

*Sharing your knowledge with enthusiasm

*No chewing gum, hats, coats, hands in pockets

*No Ummm's, Ahhh's, and Uhhhh's,

*Both students must speak during the presentation

*PRACTICE, PRACTICE, PRACTICE. I can tell. Trust me.

HOW TO TURN IN YOUR PROJECT; DUE Wednesday, January 19th by 8:15am

1. Log onto the server
2. Double click on FACULTY
3. Double click on your teacher's folder (Johnson)
4. Double click on PUBLIC
5. Drag your presentation into the DROP BOX folder.

Some Genetic Diseases and Disorders:

Cystic Fibrosis

Albinism

Waardenburg Syndrome

Marfan Syndrome

Tay-Sachs Disease

Hemophilia

Red-Green colorblindness (sex linked)

Duchenne Muscular Dystrophy

Turner and Klinefelter's Syndrome

Neurofibromatosis

Huntington's Disease

Polydactylism/Ectodactylism

Phenylketonuria(PKU)

Lesch-Nyhan Syndrome

Galactosemia

Down Syndrome

Schizophrenia

Familial Hypercholesterolemia

Osteogenesis Imperfecta (Brittle Bone Disease)

Diabetes

Parkinson's Disease

Familial Asthma

Multiple Sclerosis

Sickle-Cell Anemia

Alzheimer's Disease

Achondroplasia

Lou Gehrig's Disease

Familial Vitamin D-resistant rickets

Familial Mediterranean Fever

Gaucher Disease

Epilepsy

Prader-Willi Syndrome & Angelman's syndrome