**GENETIC DISORDER: SCIENCE 10 RESEARCH ASSIGNMENT
(20 marks for research/ 25 marks for the presentation)**

**Learning outcomes:**

* Distinguish among positive, neutral, and negative effects of various mutations
* Select relevant facts from a variety of sources

**Instructions:**

You and your partner are overjoyed to welcome your first child into the world. Unfortunately, the doctors have discovered that your child has a genetic disorder.

As a concerned parent, you want to learn as much about the disease as you can. However, you want to be sure that you are getting reliable information. Also, you want to be informed before deciding to have another child, who might also inherit the disease.

Find information using an online encyclopedia, an online database article, and a website. You will then create a two minute presentation that includes the following:

* Name of the genetic disorder
* The cause (if known)
* Symptoms
* Treatment (if any)
* Frequency or prevalence
* A list of your sources

Students will take notes during presentation. From these, they will be asked to select the two diseases that should receive the most government funding for research and to give reasons for their decision.

**Topics:**

* Turner’s Syndrome
* Tay Sachs Disease
* Albinism
* Cystic Fibrosis
* Tourette’s Syndrome
* Phenylketonuria
* Sickle Cell Anemia
* Cleft Palate
* Down’s Syndrome
* Amyotrophic Lateral Scholerosis (ALS or Lou Gehrig’s Disease)
* Haemophelia
* Spina Bifida
* Celebral palsy

**Evaluation:**

**Individual notes (20 marks) – you will use Onenote to highlight and to annotate your notes**

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| --- | --- | --- | --- | --- |
| CATEGORY  | **5 Excellent** | **4 Good** | **3 Adequate** | **0- 2 Poor** |
| **Comprehensive Content**  | Notes include all information that was requested.  | Notes include all information that was requested but lacks a few facts.  | Notes lack many facts.  | Notes lack several key elements and has many inaccuracies.  |
| **Understandability****Of notes** | Notes are in point form.Content is in words that are understandable. ORMain ideas in the text have been highlighted  | Most notes are in point form.Content, for the most part, is in language that is understandable. ORIdeas in the text have been highlighted  | Some of the notes seem copied without an understanding of what is stated. OR Most of the ideas in the text have been highlighted | Content seems copied with no understanding of what is stated.ORText has been highlighted but it is clear there is no understanding |
| **Resources used** | - 5 sources listed | - 4 sources listed | -3 sources listed | - 2 sources listed or no sources listed |
| **Works Cited**  | - Complete citation information is listed | - Citation information is listed  | - An attempt was made to list citation information  |  - No citation information is listed |

**Presentation (25 marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CATEGORY  | **5 Excellent** | **4 Good** | **3 Adequate** | **0- 2 Poor** |
| **Comprehensive Content**  | Project includes all material needed to gain a comfortable understanding of the topic.  | Project includes most material needed to gain a comfortable understanding of the material but lacks a few facts.  | Project lacks many facts.  | Project lacks several key elements and has inaccuracies.  |
| **Understandability****of content** | Slides are in point form.Content is in words that are understandable. Sequenced well.  | Most slides are in point form.Content, for the most part, is in language that is understandable. Some slides are out of sequence. | Some of the content seems copied without an understanding of what is stated. Sequence of slides needs work.  | Content seems plagiarized.Heavy use of text.Illogical order.  |
| **Visuals**  | Text (e.g., color, bold, italic) was easy to read. Excellent visuals. | Text was fairly easy to read. Good visuals. | Text may be a little hard to read. Visuals lacking or do not make sense.  | Font formatting makes it very difficult to read the material.  |
| **Presentation** | Presenters spoke clearly and loudly, and knew their topic well. | Presenters spoke clearly and loudly, and knew their topic fairly well.  | Presenters needed reminders to speak clearly and loudly, and had an idea of what they were talking about. | Presenters were difficult to hear and read off the slides. |