**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Biology Summative: Disease Project**

* **Learning Goal:** Student will investigate a disease or abnormality related to tissues, organs or systems of human.
* **Success Criteria**:
  + Students can explain the causes, diagnosis, treatments and/or prognosis of the disease
  + Students can identify what cells, tissues, organs or systems are being affected by the disease
  + Students can prepare a presentation and successfully deliver the information to the audience

**Instructions:**

|  |  |  |
| --- | --- | --- |
| 1. Asthma | 1. Sickle-cell anemia | 1. Heart disease |
| 1. Crohn’s disease | 1. Bronchitis | 1. Emphysema |
| 1. Lung Cancer | 1. Irritable Bowel Syndrome | 1. Celiac Disease |
| 1. Ulcerative Colitis | 1. Gastroparesis | 1. Hepatitis C |
| 1. Biliary Atresia | 1. Pancreatitis | 1. Cystic Fibrosis |
| 1. Coronary artery disease | 1. Kidney Stones | 1. Cerebral Aneurysm |
| 1. Cervical cancer | 1. Epilepsy | 1. Colon cancer |
| 1. HIV | 1. Anencephaly | 1. Stomach ulcers |
| 1. Addison’s disease | 1. Diagnosis of Down’s Syndrome | 1. Pneumonia |
| 1. Tuberculosis | 1. Stroke | 1. Grave’s disease |
| 1. Endometriosis | 1. Osteoporosis | 1. Meningitis |
| 1. Hiatus hernia | 1. Cushing’s syndrome | 1. Other approved by your teacher |

1. Students will choose a disease topic from the list below. Student can either work individually or with a partner.
2. Format: Students will present their work using PowerPoint, Prezi, poster, video or other format approved by the teacher. It will be a **5-min** presentation.
3. There are two deadlines for this project. You must submit your presentation file in a shared folder on Google Drive the day before your presentation.

**Due Dates:**

PowerPoint Submission Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Presentation Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The following headings must be included in your presentation.

* A **description** of the health problem, the system, specialized cells and/or tissues that it affects in the human body and what causes it.
* **Symptoms**: List symptoms of the disease and describe how the health problem affects quality of life
* **Diagnosis**: Description of the diagnostic test(s) used to identify the health problem including the **risks** and/or **benefits** associated with the diagnostic test
* **Treatment**: Explain what treatment options are available for this disease. Discuss their effectiveness, pros and cons of the treatments.
* **Prognosis**: What is the cure rate? Can the disease return to the same person?
* **Prevention**: What are the ways to prevent this disease/abnormality from occurring?
* **References** List of at least 5 references used (not all internet sources). References must be embedded and in APA format.

**RESEARCH CHECKLIST**

* Use this checklist to ensure that you have included all the required information in your final product.

|  |  |  |
| --- | --- | --- |
| **HEADING** | 🗹 | Look For… |
| **DESCRIPTION** |  | I describe the disease (what it is) |
|  | I explain how the person can get this disease or disorder |
|  | I identify the main system(s) that is affected |
|  | I identify the key organ(s), specialized cell(s) and/or tissues that are affected. |
| **SYMPTOMS** |  | I describe 4 major symptoms (physical, emotional, etc…) associated with the disease |
| **DIAGNOSIS** |  | I describe 2 methods of technology used to diagnose the disease. |
|  | I describe a risk and/or a benefit associated with each diagnostic method. |
| **TREATMENT** |  | I describe at least 2 different treatment options available |
|  | I discuss the effectiveness, pros and cons of these treatment options. |
| **PREVENTION** |  | I discuss ways that a person can prevent this disease from occurring (eg. if the disease is genetic, are there lifestyle choices that can delay the symptoms; if it is acquired, what can the person do to prevent it, etc…) |
| **PROGNOSIS** |  | I discuss the cure rate for this disease. (Can it be cured or are the symptoms treated? What is the survival rate?) |
|  | I discuss whether the disease can return to the person or not. |
| **REFERENCES** |  | I include at least 5 appropriate references, all in APA format and embedded references. |
|  | I use a variety of references (eg. journals, magazines, encyclopedia, government organizations, medical websites, etc…) |
| **Authenticity** |  | I might receive a mark of zero if plagiarism is discovered. |

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Disease Research Assignment Draft**

**Write your draft here for submission. Use your own words, DO NOT COPY SENTENCES FROM WEBSITES. Include reliable reference sites.**

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| --- |
| **Sub Topic** |
| 1. **Description**   Leukemias are grouped by how quickly the disease develops (acute or chronic) as well as by the type of blood cell that is affected (lymphocytes or myelocytes). The four main types of leukemia include acute lymphocytic leukemia (ALL), chronic lymphocytic leukemia (CLL), acute myelocytic leukemia (AML), and chronic myelocytic leukemia (CML). (MedicineNet, 2016) |
| **References**:  Last, F. M. (Year, Month Date Published). Article title. Retrieved from URL  Medicine Net. (2016). *Leukemia.* Retrieved from**http://www.medicinenet.com/leukemia/article.htm** |
| 1. **Diagnosis** |
| **References**: |
| **Symptoms** |
| **References**: |
| **Treatment** |
| **References**: |
| **Prognosis** |
| **References**: |
| **Prevention** |
| **References**: |

**Marking Scheme: Disease Research Project**

* **You MUST submit this marking scheme on your presentation day. Marks will be deducted if you don’t have one.**
* **You MUST submit the PowerPoint by the submission date (before presentation day). Marks will be deducted if you don’t have one.**

|  |  |
| --- | --- |
| **Success Criteria** | **Communication Mark** |
| * Presentation has attractive formatting and well-organized information   + use of headings and subheadings √√   + use of point forms √   + contain useful and relevant graphics √√ | /5 |
| * Show good eye contact, seldom looking at notes √√ * Has a clear voice √ * Demonstrate Enthusiasm in the topics √ * Answer questions with good explanation and elaboration √ | /5 |
| * There are at least 5 citations from a variety of sources accurately listed in APA format √√√ * Reference is embedded correctly in the final product √√ | /5 |
| **Total Mark:** | **/15** |
| **Success Criteria** | **Application Mark** |
| * Final product has all the required information |  |
| * Affected specialized cells, tissues, organs, or organ systems √√√√ * Causes of disease √√√√ | /8 |
| * + Symptoms √√√√ | /4 |
| * + Detection and diagnosis √√ √√ √√ | /6 |
| * + 2 treatment options √√   + Treatments: pros and cons √√ √√ | /6 |
| * + Preventive measures√√√√ | /4 |
| * + Prognosis √√ | /2 |
| **Total Mark:** | **/30** |