Pendle Hill High School

Responsibilities Respect Rights Learning

Faculty/Subject:	Biology	Assessment Task No:	1
Year:	12	Assessment weighting:	25%
Date Given:	Mon 18th Nov 2019	Due date and time:	Monday 16th of December 2019 by 11:59pm - Online submission only
Student name:		Teacher:	Garrett

Submission Instructions

➢ The task must be completed by the due date.

➢ This task must be submitted via the Biology class Google Classroom.

➢ Assignments received after **3:15pm** on the due date will be classed as a late submission, unless an alternate time is stated on the assessment cover sheet.

➢ Students must attend school and all scheduled classes on the due date of the assessment. See assessment handbook for details.

Absence/Late Submission

Late submission:

➢ For students in Years 11 and 12, the penalty is zero for work submitted after the due date and time. An immediate N award warning letter will be mailed to parents.

Absence:

➢ **Year 11 -12** - you are required to complete and submit to the front office an **Assessment Appeal form** within 48 hours of returning to school.

➢ Failure to provide adequate documentation will result in late submission penalties being applied.

Student Confirmation - please tick

□ This is all my own work. I have referenced any work used from other sources and have not plagiarised the work of others. I understand that plagiarised work will receive zero marks and an N award warning letter.

□ I have attached a complete bibliography - where appropriate.

□ I have kept a copy of my assignment.

Student Signature: _____

- -

Assessment Task Receipt

Students are to complete before handing in. Teacher signs the receipt that must be kept by the student.

Student Name: _____ Subject: Biology

Task No : 1   Due Date: 16/12/19   Date submitted: _____/_____/_____

Student Signature: _____ Teacher Signature:

_____

Pendle Hill High School
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Year 12 - 2019/2020 - Biology Assessment

Task 1 - Non Infectious Disease Depth Study Poster

Weighting = 25 %
54 marks
Submission - Online submission via Google Classroom only
Date handed out - 18/11/19
Due date - Week 10, Monday 16th of December 2019 by 11:59 pm.

Outcomes Assessed (admin use only):
➔ **Questioning and Predicting** - develop and evaluate inquiry questions and hypotheses to identify a concept that can be investigated scientifically, involving primary and secondary data **BIO11/12-1**

➔ **Analysing Data and Information** - derive trends, patterns and relationships in data and information **BIO11/12-5**

➔ **Problem Solving** - use scientific evidence and critical thinking skills to solve problems **BIO11/12-6**

➔ **Communicating** - select and use suitable forms of digital, visual, written and/or oral forms of communication **BIO11/12-7**

➔ **Content** - explains non-infectious disease and disorders and a range of technologies and methods used to assist, control, prevent and treat non-infectious disease **BIO12-15**

Task

Each student will conduct an individual case study on a specific disease from the list below and research its effects on the Australian community or a specific population within the Australian community. Note: each student will complete their case study on a different disease.

Non Infectious Diseases:

- Cervical cancer
- Prostate cancer
- Lung Cancer
- Skin Cancer/Melanoma
- Bowel cancer/colorectal
- Leukemia
- Sickle Cell Anemia

- Down Syndrome
- Heart Attack
- Atherosclerosis
- Diabetes Type 1
- Diabetes Type 2
- Obesity
- Asthma

- Albinism
- Cystic fibrosis
- Multiple sclerosis (MS)
- Hypertension
- Osteoporosis

For the disease you need to include the following information:

1. What is the cause of the disease?

2. Describe any risk factors that contribute to the disease.

3. What is the effect of the disease on the individual's health (symptoms), quality of life and life expectancy?

4. Incidence of the disease in Australia

5. Prevalence of the disease in Australia

6. Mortality of the disease in Australia

7. Australian prevention measures and/or campaigns for your disease AND evaluate the effectiveness at reducing the incidence/prevalence or improving quality of life or life expectancy.

8. Various treatment methods for your disease and/or complications caused by the disease.

9. Current research for new/developing methods to treat or prevent your disease.

10. Comprehensive bibliography

Poster presentation:

The information you research to answer the above will be presented on an **A2** (420 x 594 mm or 16.5 x 23.4 inches) **Google Slide in the class Google Classroom account**. This poster is your final product that is assessed for this assignment, you are responsible for making sure you turn it in by the due date. You poster should meet the following guidelines:

1. **Font size** - minimum 14 to maximum 36 (title). Note: your bibliography can be size 10 or 12.

2. Use **ONE type of font** that is easy to read - Times New Roman, Cambria, Calibri or Arial

3. Use a **colour scheme** for the entire poster - this is 2-3 different colours for the background, font and borders etc. Make sure you use a dark and a light colour to contrast so it is easy to read. You can use different shades of the same colour if they work together well.

4. Make sure your poster is presentable, include:

   a. A title

   b. Sub headings

   c. Set it up in columns or an easy to follow manner so the information is presented is a logical fashion.

   d. Graphs to present information

   e. Images

   f. Use dot points when suitable

   g. Graphs, images and tables must have individual descriptors. Descriptor font can be size 10 font. (see page 6 for examples)

5. Remember you are being marked on the information AND your poster presentation.

Individual descriptors

Incidence of breast cancer in women in 2008

Age group (years)	Number of Australian women diagnosed	% of all women diagnosed *
Younger than 20	1	Less than 1
21 to 29	65	Less than 1
30 to 39	705	5.2
40 to 49	2,437	18
50+	10,359	76.4

* Total number of women diagnosed with breast cancer in 2008 was 13,567. Only one woman under the age of 20 was diagnosed with breast cancer in 2008, which is less than one per cent of all diagnoses.

Table 1: Number of Australian women diagnosed in 2008 with breast cancer from the Breast Cancer Network Australia.

Include a title for all graphs and tables

Individual descriptor - tells you what the graph, table or image is showing. Size 10 font
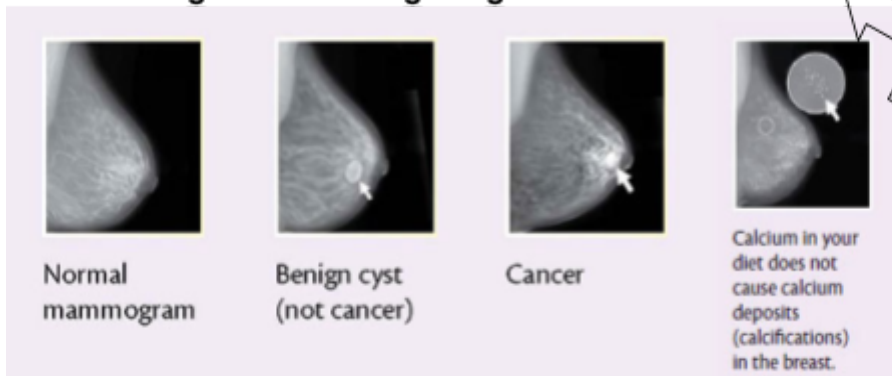
Mammogram screening images of breast for cancer

Normal mammogram

Benign cyst (not cancer)

Cancer

Calcium in your diet does not cause calcium deposits (calcifications) in the breast.

Image heading

Image 1: Mammogram images showing the different results that can be detected from this screening process.

Image individual descriptor

Marking Criteria - Non Infectious Disease Case Study

Criteria	Not Demonstrated - 0 mark	Basic - 1 mark	Satisfactory - 2 marks	Sound - 3 marks	High - 4 marks	Outstanding - 5 marks
Colour scheme	Poster is black and white	Some colour is used but it doesn't enhance the presentation or makes it hard to read.	Uses 2-3 colours in their presentation but it is inconsistent or difficult to read in places. Colours used my not be effective in capturing the audiences attention because they are not contrasting.	Uses 2-3 contrasting colours consistently to enhance the presentation and capture audience attention		
Use of title and subheading	Title and/or sub heading not present or not distinguishable from other text.	Title clearly tells the reader the disease name. Little to no use of sub headings	Title clearly tells the reader the disease name AND some sub heading used. **OR** Title and subheading are straight from the assessment questions.	Title clearly tells the reader the disease name AND some sub heading used to help summarise the information and direct the readers attention.		
Layout	No thought has gone into the layout of the poster.	Information is presented in a linear (straight) fashion or spread all over the place.	Some consideration into the position of the information is evident. Most of the information is easy to follow and the order makes sense but could be more effectively presented or the images and graphs do not complement the text it is presented with. Placement of images and/or graphs should be reconsidered.	Consideration into the position of the information is evident. The information is easy to follow and the order makes sense but could be more effectively presented by organising it neater or providing clearer tesxt regions (columns) or the images and graphs over power the text presented.	Layout of text, images and graphs is logical, complements each other and allows the read to effectively follow the information presented in a manner that ensures the information is presented clearly. (When read left to right, the reader understands the cause --> effect --> data --> prevention --> treatment --> future research)	
Graphs &/or table	No graphs used to present data	A graph is used but it's information or importance isn't clear	A graph is used to present some information but not linked/referred to by the text	Graph/s and/or tables are used to present information in an easy to read manner but is not linked/referred to by the text OR missing individual descriptors.	Graph/s and/or tables are used to present information in an easy to read manner AND is link/referred to the text and has suitable individual descriptors.	
Images	No images used or images presented are blurry or poor quality.	Images relate to the text but size of image is poor quality and missing individual descriptors.	Images relate to the text and presented in a suitable size but missing individual descriptors.	Images relate to the text, presented in a suitable size AND have suitable individual descriptors OR referred to in the text.	Images relate to the text, presented in a suitable size, have suitable individual descriptors AND referred to in the text.	
Cause of disease	Not provided, incorrect or unclear information.	General information provided for the cause of the disease but not specific for the disease being presented.	A brief summary of the cause of the specific disease is provided.	A detailed description of the cause of the disease is provided.		
Risk factors description	Not provided, incorrect or unclear information.	1 risk factor is identified but no description.	More than 1 risk factor is identified with no description. OR A brief description is provided for 1 - 2 risk factors.	A comphrehensive list of suitable risk factors for disease is provided AND they are described accordingly. (NOTE: the number of risk factors will vary depending on the disease)		
Effects of the disease on the individual's health (symptoms), quality of life and life expectancy	Not provided, incorrect or unclear information.	Effects of the disease briefly or poorly identified. **OR** only the effect on **ONE** aspect of the individual's life is covered.	**TWO** of the following addressed briefly - effects of the disease on the individual's health, quality of life OR life expectancy	All **THREE** of the following addressed briefly - effects of the disease on the individual's health, quality of life and life expectancy	All **THREE** of the following addressed in sufficient detail for the disease - effects of the disease on the individual's health, quality of life and life expectancy	

Marking Criteria - Non Infectious Disease Case Study

Criteria	Not Demonstrated - 0 mark	Basic - 1 mark	Satisfactory - 2 marks	Sound - 3 marks	High - 4 marks	Outstanding - 5 marks
Incidence vs prevalence of the disease	Not provided, incorrect or unclear information.	Data on the invidence or prevalence provided. OR Data NOT Australian information but from another country.	Some Australian data on the incidence AND prevalence presented but incomplete or lacking details such as the year the data was collected. OR Data presented is out of date for research into the disease (data should be no older than 15 years).	Australian data on the incidence AND prevalence that is current for the disease. (data should be no older than 15 years).		
Mortality of the disease	Not provided, incorrect or unclear information.	Basic and unspecific data on the mortality **OR** Data NOT Australian information but from another country.	Some Australian data on the mortality presented but incomplete or lacking details such as the year the data was collected. **OR** Data presented is out of date for research into the disease (data should be no older than 15 years).	Australian data on the mortality that is current for the disease (data should be no older than 15 years).	Australian data on the mortality that is current for the disease **AND** relates the mortality trends of the disease to the prevalence or incidence of the disease. (data should be no older than 15 years).	
Prevention measures and/or campaigns for your disease and their effectiveness	Not provided, incorrect or unclear information.	One prevention measures is briefly outlined.	One prevention measures is described in detail. **OR** two prevention measures are briefly outlined.	TWO prevention measures and/or campaigns for your disease are describe in detail AND you have mentioned but not evaluated the effectiveness of each measure/campaign at reducing the incidence/prevalence or improving quality of life or life expectancy for sufferers of the disease.	TWO prevention measures and/or campaigns for your disease are describe in detail AND you have ATTEMPTED to evaluated the effectiveness of each measure/campaign at reducing the incidence/prevalence or improving quality of life or life expectancy for sufferers of the disease.	TWO prevention measures and/or campaigns for your disease are describe in detail AND you have clearly evaluated the effectiveness of each measure/campaign at reducing the incidence/prevalence or improving quality of life or life expectancy for sufferers of the disease.
Various treatment methods for your disease and/or complications caused by the disease.	Not provided, incorrect or unclear information.	One treatment method is briefly outlined.	One treatment method is described in detail. **OR** two treatment methods are briefly outlined.	Two treatment methods are described in detail.	Three treatment methods are identified with limited detail on the actual method.	Three treatment methods are described in detail.
Current research and/or programs occurring to treat or prevent your disease.	Not provided, incorrect or unclear information.	One current research project is identified for a collective group of diseases which includes the disease being studied (e.g. impact of physical activity at reducing the incidence of heart disease, obesity and type 2 diabetes)	One current research for the specific disease is identified.	One or more current research projects for the specific disease is identified and/or briefly outlined.	ONE current research project is outlined with its significance potential benefits or findings of the researched identified. **OR** TWO current research projects are outlined but no potential benefits or findings of the researched identified	Two current research projects are outlined with its significance in potential benefits or findings of the researched identified.
Comprehensive bibliography	No resources referenced	1-2 resources referenced correctly or URL website links is the only information provided.	3-5 resources referenced correctly - including Title of source, website URL, author/organisation, date the information was published and date YOU accessed the information.	6-8 resources referenced correctly - Each referenced source includes: the title of the source, website URL, author/organisation, date the information was published and date YOU accessed the information.	More than 8 resources referenced correctly, including images, graphs and tables - Each referenced source includes: the title of the source, website URL, author/organisation, date the information was published and date YOU accessed the information.	

Total out of 54 =