



# ORANGE HIGH SCHOOL

## ASSESSMENT TASK NOTIFICATION

<b>Subject</b>	Science
<b>Topic</b>	Living World: Independent Research Project
<b>Class Teacher</b>	
<b>Head Teacher</b>	Huggett
<b>Year</b>	9
<b>Date Given</b>	Week 3, Term 3
<b>Date Due</b>	Week 7, Term 3 (Specific date given by teacher)
<b>Weighting</b>	25%

### Assessment Outline

You will need to produce a research report and develop a brochure on an infectious disease.

In your report you must:

1. Research ONE infectious diseases that effects humans, this can be from the list below or any other disease approved by your classroom teacher.
2. Include information under the subheadings:
  - a. Literature review
    - i. Cause of the infectious disease.
    - ii. Symptoms of the infectious disease.
    - iii. Submit a bibliography to acknowledge where you collected your information
    - iv. How is your collected information reliable?
  - b. Results
    - i. Statistics / data of the infectious disease in Australia or other countries if data is not available in Australia.
  - c. Discussion
    - i. Trends in the data of the infectious disease.
    - ii. Impacts of the infectious disease on society.
  - d. Conclusion
    - i. Design an educational brochure with information on how to reduce the number of infections / deaths of the disease.
    - ii. Evaluate the effectiveness and limitations of this response.

→ Make sure you research your information from accurate and reliable sources.

### Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both cases.

### Plagiarism:

Plagiarism, the using of the work of others without acknowledgement, will incur serious penalties and may result in a zero award. Any cheating will also incur penalties.

**Failure to follow the above procedures may result in a zero award.**

**The policies and procedures that are outlined on the ROSA booklet will be followed regarding the non-completion of assessment tasks.**

### Outcomes Assessed

- **SC5 - 8WS** Selects and uses appropriate strategies, understanding and skills to produce creative and plausible solutions to identified problems
- **SC5 - 7WS** Process and analyse data and information from secondary sources
- **SC5 - 15LW** Explains how biological understanding has advanced through scientific discoveries, technological developments and the needs of society

### **Scaffold**

Choose an infectious disease, you may choose one not from this list, please discuss with your teacher.

Typhoid Fever	Meningococcal	Measles
Tuberculosis	Chicken Pox	HIV
Ebola	Swine Flu	Hepatitis B
Malaria	Polio	Whooping Cough

Infectious disease: \_\_\_\_\_

### **Literature review**

The literature review is to provide extensive background information that you have researched on your chosen infectious disease. It should provide all key information that the reader should know. It should also include a section on how you collect your information to ensure it is from an accurate and reliable source. Information that you could include in your literature review (You need to expand outside of the scope of these questions):

- The type of pathogen that causes the disease.
- What cells or part of the body the pathogen effects?
- Where does the pathogen come from?
- How does the disease spread?
- What effect does the pathogen have on humans?
- What body processes are affected?
- How deadly is the disease?
- What will happen if the disease is left untreated and how will this impact the world?

### **Bibliography**

Use the scaffold provided to acknowledge where you collected your information from. Make sure your research is from accurate and reliable sources.

- How can you ensure that the information you have collected from a variety of sources is reliable?

### **Results**

The Results section should include the data and statistics of your chosen infectious disease. This data should be presented in the form of tables and graphs. Data to include (but is not limited to):

- How many people get infected with the disease each year in Australia (or other countries if no data on Australia can be found).
- How many deaths are due to the infectious disease each year in Australia (or other countries if no data on Australia can be found).
- You must also describe the data you have collected.
- Look at the information collected and examine the phrase – ‘Correlation vs causation’ in relation to your information.

## **Discussion**

In the discussion you should examine the impact of the disease on society and analyse the trends in the data collected in the results. It should also evaluate the trends and explain the reason for any changes over time.

Questions to include (but is not limited to):

- How has the number of infections changed over time?
- Why has there been a change of infections over time?
- How has our knowledge / understanding of the disease changed over time?
- How has the treatment of the infectious disease changed?
- Analyse your research from your literature review and data collection and discuss how they have contributed to your ideas examined in this section.

## **Conclusion – Educational Brochure**

In the conclusion, you are to use all the information researched to design an educational brochure designed to help prevent the spread of an infectious disease, to reduce the number of infections/deaths which will change the impact the disease has on society. You will need to evaluate the effectiveness and limitations and the impact it may have.

Questions to include (but is not limited to):

- What more can governments and other health organisations do to reduce the number of infections/deaths and impact of society?
- Explain the benefits of your idea.
- Evaluate the limitations of the educational brochure you have created.
- Justify the educational brochure you have created in relation to its impact today on society

**Marking Rubric: Scientific Article (Due: Term 3 Week 7) Student Name:**

**Class:**

		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>0</b>	<b>Total</b>
		Has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.  <b>(EXTENSIVE)</b>	A high level of competence in the processes and skills and can able to apply these skills to most situations.  <b>(THOROUGH)</b>	An adequate level of competence in the processes and skills.  <b>(SOUND)</b>	A limited level of competence in the processes and skills.  <b>(BASIC)</b>	Very limited competence in some of the processes and skills.  <b>(ELEMENTARY)</b>	Not attempted	
<b>SC5- 7WS</b> Process and analyse data and information from secondary sources	<b>Literature review</b>	The research is extensive with many (5 or more) pieces of research summarised. Some scientific journals/papers are used. Links to impacts.  5	The research is extensive, and the information is brief scientific journal/paper mentioned.  4	The research is completed but the number is small, or the information does not relate to it.  3	The research is attempted, and some information is provided.  2	The research is attempted but little information relevant to your research question are included.  1	0	<b>/15</b>
	<b>Bibliography</b>	Uses a wide range of reliable and valid secondary sources (7 or more) to gather reliable information.  Bibliography follows the scaffold provided.  5	Uses a wide range of reliable and valid secondary sources (6 or more) to gather reliable information.  Bibliography follows the scaffold provided.  4	Uses a range of relevant secondary sources (at least 5) to gather reliable information.  Bibliography is listed but not all information is provided.  3	Uses some relevant secondary sources (at least 3) to gather reliable information.  Bibliography is listed but not all information is listed.  2	Uses a limited number of secondary sources (1 – 2 sources) to gather information.  Name of source is listed only.  1	0	
	<b>Results</b>	Data collected is collated, calculated and the trends identified.  Graphs, tables or visual devices are complete information to explain the data is detailed. Links to impacts.  5	Data collected is mostly collated, calculated and trends are somewhat identified.  Graphs, tables or visual devices are mostly complete and information relating to explain the data is included.  4	Data is collected and collated and presented in an effective manner.  The relationships between data is somewhat identified.  3	Data is collected and collated in a basic manner  Graphs and tables are included but not all correct.  2	An attempt has been made to collate and present data.  1	0	

<p><b>SC5-15LW</b> Explains how biological understanding has advanced through scientific discoveries, technological developments</p>	<p><b>Discussion</b></p>	<p>Extensively examines the impact of the disease on society in detail.</p> <p>Thoroughly analyses the reasons the data has changed over time.</p>	<p>Examines the impact of the disease on society in detail.</p> <p>Analyses the reasons the data has changed over time.</p> <p>Relates treatment and prevention of disease to trends in data.</p>	<p>Explains the impact of the disease on society.</p> <p>Explains the reasons the data has changed over time.</p> <p>Describes the link between treatment and</p>	<p>Describes the impact of the disease on society.</p> <p>Describes the reasons the data has changed over time.</p>	<p>Identifies the impact the disease has on society.</p> <p>Identify a change in data over time.</p> <p>Identifies a treatment or prevention.</p>	<p>0</p>	<p>/5</p>
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<p>and the needs of society</p>		<p>Evaluates the treatment and prevention of the disease and relates to the trends in data. Links to impacts.</p> <p>5</p>	<p>4</p>	<p>prevention of the disease to trends in data.</p> <p>3</p>	<p>Identifies the link between treatment and prevention.</p> <p>2</p>	<p>1</p>		
<p><b>SC5-8WS</b> selects and uses appropriate strategies, understanding and skills to produce creative and plausible solutions to identified problems</p>	<p><b>Educational Brochure</b></p>	<p>Create a comprehensive Educational Brochure to reduce the number of cases of the disease.</p> <p>5</p>	<p>Create a detailed Educational Brochure to reduce the number of cases of the disease.</p> <p>4</p>	<p>Create an Educational Brochure to reduce the number of cases of the disease.</p> <p>3</p>	<p>Simple Educational Brochure included.</p> <p>2</p>	<p>Vague Educational Brochure included.</p> <p>1</p>	<p>0</p>	<p>/20</p>
<p>Specific benefits of the Educational Brochure are explained.</p> <p>5</p>	<p>Benefits of the Educational Brochure are described and explained.</p> <p>4</p>	<p>Benefits of the Educational Brochure are explained.</p> <p>3</p>	<p>Benefits of the Educational Brochure are described.</p> <p>2</p>	<p>Benefits of the Educational Brochure are included.</p> <p>1</p>	<p>0</p>			
<p>Extensively evaluates the limitations of their Educational Brochure</p> <p>5</p>	<p>Evaluates the limitations of their program/ Campaign</p> <p>4</p>	<p>Explains a limitation of their program/ campaign</p> <p>3</p>	<p>Simple limitations of their program/ campaign is described</p> <p>2</p>	<p>Limitations of their program/ campaign is included</p> <p>1</p>	<p>0</p>			

		Detailed justification of the Public Health Program / Campaign in relation to its impact in today's society 5	Satisfactory justification of the Public Health Program / Campaign in relation to its impact in today's society 4	Attempted justification of the Public Health Program / Campaign in relation to its impact in today's society 3	Describe an impact of the Public Health Campaign to society 2	Describe an impact of the Public Health Campaign to society 1	0	
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**Comments:**
