



Coonabarabran High School Assessment Notification

Subject: Year 10 Science

Date of Notification: 21.10.20

Assessment task 5: Case Study

Date Due: 06.11.20

Weighting: 20%

Teacher: S Moore, K Christoff, K Nash

Topic: Biotechnology and Global Issues

Task structure: Case Study

Length of completed task: The equivalent of one A4 page of 12 font typing plus relevant pictures or diagrams and bibliography

THE TASK:

You will complete a case study where a named biotechnology has been used in the last 50 years to solve a global issue. To address the criteria of this task you must:

- Include a timeline of development of the named biotechnology
- Describe how the biotechnology works
- Identify social, environmental and economic impacts of the biotechnology (how the biotechnology is expected to solve the global issue and also possible problems that may occur through its use)
- Use 'comment' to provide the definition of five key words related to the biotechnology
- Complete a bibliography using at least 4 sources and assess two of the sources in your bibliography

Four periods of class time will be allocated to completing this task. The task is to be submitted in Google classroom.

Success criteria: You will be assessed on how well you:

1. Demonstrate your understanding of biotechnology
2. Communicate the facts of the case study
3. Use relevant diagrams to enhance your descriptions and explanation of concepts
4. Use appropriate scientific diagrams
5. Present your work in a logical and structured sequence
6. Use the comment function to provide the definition of five key words related to the biotechnology
7. Assessment of the validity of two of your sources

Outcomes being assessed:

Knowledge and Understanding	Skills
A student SC5-14LW analyses interactions between components and processes within biological systems SC5-15LW explains how biological understanding has advanced through scientific discoveries, technological developments and the needs of society	A student: SC5-5WS produces a plan to investigate identified questions, hypotheses or problems, individually and collaboratively SC5-7WS processes, analyses and evaluates data from first hand investigations and secondary sources to develop evidenced- based arguments and conclusions SC5-9WS presents science ideas and evidence for a purpose and to a specific audience, using appropriate scientific language, conventions and representations

Year 10 Biotechnology Case Study - Marking Guide

Name: _____

Marks	10-9	8-7	6-5	4-3	2-1	0
Knowledge and Understanding	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates an in-depth understanding of the topic <input type="checkbox"/> Demonstrates an in-depth understanding of why the biotechnology was developed. <input type="checkbox"/> Thoroughly explains the use of the biotechnology to solve the global issue <input type="checkbox"/> Explains the social, economic and environmental impacts of the named biotechnology. <input type="checkbox"/> Clearly labelled diagram of the identified biotechnology. <input type="checkbox"/> Detailed description of the biotechnology. <input type="checkbox"/> Includes a complete timeline for the named biotechnology. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates a thorough understanding of the topic. <input type="checkbox"/> Demonstrates a thorough understanding of why the biotechnology was developed. <input type="checkbox"/> Explains the use of the biotechnology to solve the global issue <input type="checkbox"/> Demonstrates there are economic, social and environmental impacts of the named biotechnology. <input type="checkbox"/> Labelled diagram of the identified biotechnology. <input type="checkbox"/> Describes the biotechnology. <input type="checkbox"/> Includes a complete timeline for the named biotechnology. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates a sound understanding of the topic. <input type="checkbox"/> Demonstrates a sound understanding of why the biotechnology was developed. <input type="checkbox"/> Describes the use of the biotechnology to solve the global issue <input type="checkbox"/> Inclusion of some economic, social or environmental impacts of the named biotechnology. <input type="checkbox"/> Diagram of the named biotechnology. <input type="checkbox"/> Outlines the named biotechnology. <input type="checkbox"/> Includes a timeline for the named biotechnology. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates a basic understanding of the topic. <input type="checkbox"/> Demonstrates a basic understanding of why the biotechnology was developed. <input type="checkbox"/> Outlines the use of the biotechnology to solve the global issue <input type="checkbox"/> Includes a relevant economic, social or economic impacts of the named biotechnology. <input type="checkbox"/> Diagram of a biotechnology. <input type="checkbox"/> Names biotechnology <input type="checkbox"/> Identifies a timeline for a biotechnology. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates a limited knowledge of the topic. <input type="checkbox"/> Demonstrates a limited knowledge of why the biotechnology was developed. <input type="checkbox"/> Identifies the use of the biotechnology to solve the global issue <input type="checkbox"/> Identifies there are economic, social or environmental impacts of the named biotechnology. <input type="checkbox"/> Names a biotechnology <input type="checkbox"/> Identifies a timeline for a biotechnology. 	<p>Not attempted.</p> <p style="text-align: right;">_____/10</p>

Marks	5	4	3	2	1	0
Processing and analysing data and information	<ul style="list-style-type: none"> <input type="checkbox"/> Gathers and uses accurate and relevant information from a range of sources. <input type="checkbox"/> Summarises information from secondary sources <input type="checkbox"/> Uses gathered information to synthesise ideas that are correct and accurate <input type="checkbox"/> Accurately assesses the validity of two identified sources of information used for this case study 	<ul style="list-style-type: none"> <input type="checkbox"/> Gathers and uses accurate and relevant information from a range of sources. <input type="checkbox"/> Summarises information from secondary sources <input type="checkbox"/> Some use of information to synthesise ideas <input type="checkbox"/> Assesses the validity of two identified sources of information used for this case study 	<ul style="list-style-type: none"> <input type="checkbox"/> Gathers and uses information relevant to the topic. <input type="checkbox"/> Includes mostly accurate and relevant information <input type="checkbox"/> Employs researched information with an adequate degree of accuracy <input type="checkbox"/> Comments on the validity of one identified sources of information used for this case study 	<ul style="list-style-type: none"> <input type="checkbox"/> Identifies some information related to the topic <input type="checkbox"/> Includes information that is not relevant to target audience <input type="checkbox"/> Uses researched information with a fair degree of accuracy <input type="checkbox"/> Comments on the validity of one source of information used for this case study 	<ul style="list-style-type: none"> <input type="checkbox"/> Identifies some relevant information. <input type="checkbox"/> Includes paragraphs/text that have been cut-and-paste from the Internet. <input type="checkbox"/> Comments on one source of information used for this case study 	<p>Not attempted.</p> <p>_____/5</p>
Marks	10-9	8-7	6-5	4-3	2-1	0
Communication	<ul style="list-style-type: none"> <input type="checkbox"/> Information is presented in a logical and structured sequence <input type="checkbox"/> Uses paragraphs and sentences correctly. <input type="checkbox"/> Punctuation and capitalisation are correct throughout the case study. <input type="checkbox"/> Information is clear and easily understood. <input type="checkbox"/> Effectively uses scientific language <input type="checkbox"/> Includes diagrams that complement the text. <input type="checkbox"/> Includes five annotated definitions 	<ul style="list-style-type: none"> <input type="checkbox"/> Information is presented in a logical and structured sequence <input type="checkbox"/> Uses paragraphs and sentences. <input type="checkbox"/> Punctuation and capitalisation are correct throughout the case study. <input type="checkbox"/> Information is clear and easily understood. <input type="checkbox"/> Uses scientific language <input type="checkbox"/> Includes diagrams that complement the text. <input type="checkbox"/> Includes four annotated definitions 	<ul style="list-style-type: none"> <input type="checkbox"/> Information is mostly presented in a logical and structured sequence <input type="checkbox"/> Some use of paragraphs and sentences. <input type="checkbox"/> Punctuation and capitalisation are mostly correct throughout the case study. <input type="checkbox"/> Mostly uses scientific language <input type="checkbox"/> Includes relevant diagrams. <input type="checkbox"/> Includes three annotated definitions 	<ul style="list-style-type: none"> <input type="checkbox"/> Some information is presented in a logical and structured sequence <input type="checkbox"/> Some of the writing is done in complete sentences <input type="checkbox"/> Punctuation and capitalisation is mostly correct throughout the case study. <input type="checkbox"/> Some attempt made to use scientific language <input type="checkbox"/> Includes a relevant diagram. <input type="checkbox"/> Includes two annotated definitions 	<ul style="list-style-type: none"> <input type="checkbox"/> Limited organisation of information <input type="checkbox"/> Incomplete sentences <input type="checkbox"/> Minimal use of punctuation and capitalisation. <input type="checkbox"/> Includes a relevant diagram. <input type="checkbox"/> Limited attempt to use scientific language <input type="checkbox"/> Graphics do not go with accompanying text or appear to be randomly selected. <input type="checkbox"/> Includes one annotated definition 	<p>Not attempted.</p> <p>_____/10</p>