

Biology Culminating Task

SNC2D

Your task is to design a pamphlet on a biological technology (chosen in consultation with your teacher) and its impact on individuals and society. You may submit your finished product in hard copy format or (preferably) electronic copy format.

Whatever your chosen technology, you must research and find the following pieces of information (refer to the attached rubric for the marking scheme):

- ✓ description of the technology
- ✓ pictures/diagrams of the technology
- ✓ why it would be ordered by a doctor and its effectiveness
- ✓ where it is usually carried out (hospital, clinic, etc.) and what training is required to use it
- ✓ what it costs and who pays for it (note: procedures covered by OHIP are not “free”)
- ✓ potential drawbacks of the technology

Possible technologies include:

1. x-rays
2. fluoroscopy
3. nuclear medicine (using radioisotopes)
4. ultrasound
5. computed tomography (CT)
6. endoscopy
7. magnetic resonance imaging (MRI)
8. positron emission tomography (PET)
9. biophotonics
10. vaccination/immunization
11. insulin pumps
12. routine cancer screening (mammograms, pap smears, etc.)
13. blood tests
14. DNA screening
15. gene therapy
16. organ transplants
17. kidney dialysis
18. chemotherapy
19. radiation therapy
20. electrocardiogram (ECG)
21. angiogram
22. defibrillator
23. pacemaker
24. prostheses
25. spirometry
26. in-vitro fertilization
27. stem cell transplants
28. therapeutic cloning
29. laser surgery
30. anaesthesia

Biology Culminating Task Rubric

Criteria	Level 1 (5.5)	Level 2 (6.5)	Level 3 (7.5)	Level 4 (8-10)
Description of the technology	Information is present but there are significant errors or omissions in content.	Information is mostly complete and generally clear with minor errors or omissions in content.	Information is complete and clear.	Information is complete, clear, and specific.
Pictures and/or diagrams	Pamphlet contains at least one picture or diagram.	Pamphlet contains at least one appropriate picture or diagram.	Pamphlet contains at least one clearly labelled and appropriate picture or diagram.	Pamphlet contains multiple clearly labelled and appropriate pictures or diagrams.
Explanation of its use	Information is present but there are significant errors or omissions in content.	Information is mostly complete and generally clear with minor errors or omissions in content.	Information is complete and clear.	Information is complete, clear, and specific.
Where it is used and training required	Information is present but there are significant errors or omissions in content.	Information is mostly complete and generally clear with minor errors or omissions in content.	Information is complete and clear.	Information is complete, clear, and specific.
Monetary cost	Information is present but there are significant errors or omissions in content.	Information is mostly complete and generally clear with minor errors or omissions in content.	Information is complete and clear.	Information is complete, clear, and specific.
Possible drawbacks	Information is present but there are significant errors or omissions in content.	Information is mostly complete and generally clear with minor errors or omissions in content.	Information is complete and clear.	Information is complete, clear, and specific.
Visual presentation	Some visual elements are apparent but may detract or distract from understanding.	Some visual elements are apparent.	Visual elements in the layout are designed to increase visual interest.	Strong visual elements in the layout, including font and colour, are designed to increase visual interest and enhance understanding.
Organization	Some organization is apparent.	Pamphlet is organized into sections.	Pamphlet is organized with all sections clearly labelled.	Pamphlet is logically organized with all sections clearly labelled.
Spelling and word use	Some spelling or grammatical errors are apparent and word choices are often informal, inaccurate, or too technical.	Some spelling or grammatical errors are apparent and some word choices are informal, inaccurate, or too technical.	Few spelling or grammatical errors are apparent and word choice is generally appropriate.	No spelling or grammatical errors are apparent and word choice is consistently appropriate.
References	Some information is attributed to a source and/or only one source is cited.	Most information is attributed to a source and at least two different sources are cited.	All information is attributed to a source and at least two different sources are cited.	All information including diagrams is attributed to a source and at least three different sources are cited.

Note: Google and Google Images are not sources. Google is getting the information from somewhere. Where?