

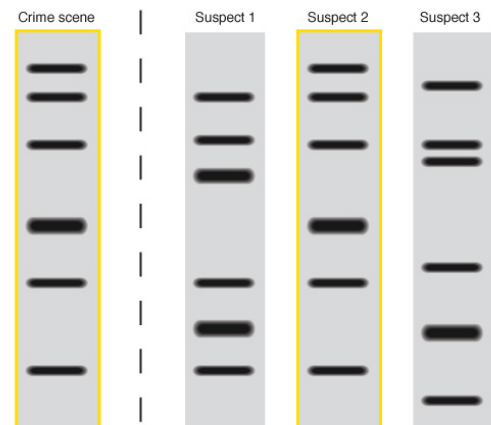
## DNA Technologies

Over the last 60 years, the combination of science and technology has allowed us to learn more about DNA and how to modify, or make changes to, genes. These techniques are often called biotechnology. Genes can now be manipulated, altered or changed.

Advancements that have come from biotechnology can affect many aspects of our lives. The result can be both positive and negative, as well as raise social, ethical, environmental, economic or legal issues. In this project you will be looking more in depth into the DNA technology of your choice.

**Examples of DNA technologies include but are not limited to:**

- Gene cloning
- Transgenic organisms (Plants/Animals)
- Reproductive technologies
  - Artificial insemination
  - In vitro fertilization
- Gene therapy
- Agriculture use- food crops and testing for viruses
- Testing for invasive species
- DNA profiling
  - Forensic technique in criminal investigations
- Ancestry profiling
  - Trace back your family tree



Your task will be researching one of the topics of your choice. **You can use any method to present your information. Some examples include but are not limited to:**

- A Powerpoint, Presi, Google Slides presentation
- A Large Poster
- A video presentation
- A skit (you may use family members :P )

The class notes and Textbook will give you an idea of what DNA technologies are out there. You can use one of these topics but do not have to. Please choose a topic that interests you!

**Reference Textbook pages: 70-83**

## Your presentation must include the following

- Background information on your topic
  - What it is
  - How it works
  - Examples of this technology is used today
- What are the benefits of this technology and who specifically is impacted
  - Look at benefits from the following areas
    - Social, environmental, health, economic
- What are concerns or risks associated with this technology
  - Environmental concerns
  - Health effects
  - Ethical, social, economic or legal concerns
- Current research being done surrounding your topic

## Evaluation

You will be evaluated on the content of your topic and the quality of your presentation medium.

You must include a bibliography cited in APA format. Easy bib is fine.

3 of your sources must be from scientific journals, newspapers or databases. The **GALE database** is a great place to start. It is located on the school website under library, the password is **Burnaby**.

**Refer to Rubric on next sheet.**

**Rubric**

<b>Content</b>	
<ul style="list-style-type: none"> <li>• Background information on your topic <ul style="list-style-type: none"> <li>○ What it is</li> <li>○ How it works</li> <li>○ Examples of this technology is used today</li> </ul> </li> </ul>	
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<ul style="list-style-type: none"> <li>• Current research being done surrounding your topic</li> </ul>	
<b>Presentation-Written (powerpoint or poster)</b>	
Aesthetically pleasing	
Text is appropriate colour and size Text is limited	
Pictures or videos add and do not detract from presentation	
Logical sequence Transitions are varied and appropriate	
<b>Presentation-Verbal (Video/Skit etc)</b>	
Pronunciation/volume Audience can hear you	
Body language <ul style="list-style-type: none"> <li>• Confident</li> <li>• Looking at audience</li> <li>• Not reading directly from script</li> </ul>	
Props <ul style="list-style-type: none"> <li>• Add to presentation and do not detract</li> </ul>	
Memorable	