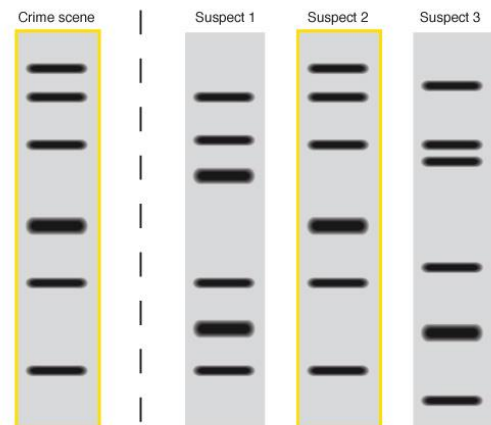


## DNA Technologies

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
- Ancestry profiling



In **groups of 2** you will be researching one of the topics of your choice. No two groups can do the same topic. You will sign up with Ms Hemingway once you have chosen a topic. You will prepare a powerpoint or presi presentation of no longer than 5 minutes.

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, the quality of your powerpoint and your presentation skills.

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 must be handed in with presentation.**

**Presentation will be handed in on blog by MONDAY DECEMBER 10.**

**Presentation will be done by random draw.**

**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>	
<ul style="list-style-type: none"> <li>• What are the benefits of this technology and who specifically is impacted <ul style="list-style-type: none"> <li>○ Look at benefits from the following areas <ul style="list-style-type: none"> <li>▪ Social, environmental, health, economic</li> </ul> </li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• What are concerns or risks associated with this technology <ul style="list-style-type: none"> <li>○ Environmental concerns</li> <li>○ Health effects</li> <li>○ Ethical, social, economic or legal concerns</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Current research being done surrounding your topic</li> </ul>	
<b>Powerpoint</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</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>	
Memorable	
Time Usage : Around 5 minutes	