**YEAR 12 ATAR HUMAN BIOLOGY**

**UNIT 3**

TASK 6 - Vaccine Extended Response

Diagram

Description automatically generated with low confidence

Vaccinations are one of the most effective methods at preventing disease and have helped lower the mortality rate associated with infectious diseases worldwide for over 200 years.

The last 2 years has seen the world ravaged by a pandemic created by SARS-Cov2, commonly known as COVID-19. As a result, the world came together to develop a number of COVID-19 vaccines to combat its impact on society. The 3 main vaccines are Pfizer, AstraZeneca and Novavax, all developed using different technology.

**OVERVIEW OF THE TASK**

The task will be completed in two parts. (2 lessons in total)

**PART A - RESEARCH:**

Completion of research notes and evaluation of scientific article (1 lesson)

COVID-19

* What is it? When and where did it originate? How does it affect humans and what are the symptoms of COVID-19?

Vaccines

* Define what is a vaccine and explain how they bring about increased immunity.
* Research the preparation of the 4 main vaccines identifying advantages and disadvantages of each
* Ethical considerations surrounding vaccine preparations and distribution

Article evaluation

* Recombinant DNA is the new future of Vaccines. Attached is an article that discusses different types of recombinant vaccines. Be sure you understand what is meant by recombinant DNA and how it is created. Then read the attached article and be prepared to answer questions based on its contents.

**PART B - VALIDATION**: In-class validation on your research and scientific article. (1 lesson)

**What you need to do**

**1. RESEARCH NOTES**

* Using the paper provided evaluate its content, making summary notes/annotations in the margins.
* Organise your notes into a suitable format, no longer than 1 page (large sections of text copied from sources is not acceptable)

**2. In-class assessment - VALIDATION TEST (58 marks)**

* You are able to bring in 1 page of notes as well as the article which may be highlighted with brief notations in the margins.
* You will be given specific questions based on the content of the scientific research paper “Recombinant vaccines for COVID-19” and your research.