Task

This assessment will involve research into the application of PCR and how it’s used. You can choose an example from the fields of human (e.g., medical science or forensics), plant (e.g., transgenic plants) or animal (e.g., ecology and conservation) science and **describe how PCR is applied in that context and describe the methodology and the results produced.**

You can describe the use of PCR in a research setting or look for examples where PCR is being used in an applied setting; Example of Application of PCR: PCR is a critical part of many genetic tests; it is also part of DNA sequencing that is used to determine the DNA sequences of living and extinct organisms.

\*YOU ARE NOT ALLOWED TO USE COVID-19 TESTING AS AN APPLICATION OF PCR\*

Info required

**Information about what is being amplified in the PCR reaction, what is the target sequence is for the PCR (is it a specific gene? Or a specific area on a chromosome? Certain region on the genome that is targeted?) Dig this information out of your research paper and explain it.**

**Explain what primers are used to amplify/PCR the specific sequence/region.**

Criteria

- The description of the application of PCR: this requires you to **describe why PCR is a such a valuable method**. For example, PCR is very good at amplifying very small amounts of DNA, making it valuable in the fields of forensics and archaeology

- Appropriate **use of figures to describe and explain the methodology**

- Appropriate use of references and the use of **Vancouver referencing** style, you must **reference any figures you use.**

 - Appropriate use of language & terms (spelling and grammar checked)

 - Presented in a professional/academic manner that is easy to read and follow

The application of PCR to human, plant, or animal science

Scientific facts and concepts clearly explain an application of PCR. Information is presented that demonstrates a clear understanding of the topic. An effective use of language that informs and engages the reader.

Language and structure

Engages and assists the reader to quickly gain an understanding of the topic and its significance. All arguments are developed with a clear logical progression.

Format

- You are not required to write a summary, introduction, or conclusion, although your writing should be structured (both language and format) with a logical flow of ideas.

- **You must include tables/figures** as appropriate; these are not included in the word count.

When using figures from research papers etc., you must provide your own **figure legend** (not copied from the figure) that highlights the key points of the figure in the context of what you are describing in the body of the text.

- The reference list is not included in the word count.

Resources

- **Only scientific references** (look for a research paper that uses the PCR method that you want to describe), Peer-reviewed publications are the best source of information in the biological and medical science fields.

- Online databases such as PubMed contain a searchable database of publications in the biological, biomedical, and health sciences.

- Any information used from books, journals or the Internet MUST be referenced. Failure to reference a source is plagiarism