Genetics PBL Rubric

	Approaching (2)	Meeting (3)	Mastery (4)
Inquiry of genetic technology	An energy resource is chosen without context. Background information is superficial.	Little evidence of personal engagement and initiative in choosing the resource. Background information is relevant.	Genetic technology is clearly described. Evidence of personal engagement is clear with significant independent thinking. Background information enhances understanding and includes First Peoples perspectives.
Processing and analyzing data	Insufficient raw data to support a valid conclusion to the research question. Some basic data processing is carried out. Little consideration of the impact of measurement uncertainty.	The report includes relevant but incomplete raw data. Appropriate data processing is carried out. Some consideration of measurement uncertainty	The report includes sufficient raw data. Sufficient data processing is carried out with the accuracy required to enable a conclusion that is fully consistent with the experimental data. Full consideration of the impact of measurement uncertainty.
Applying, adapting and innovating	Strengths and weaknesses of the investigation are restricted to an account of procedural issues faced. Very few realistic suggestions for the improvement and extension of the genetic technique.	Some realistic and relevant suggestions for the improvement and extension of the investigation. Strengths and weaknesses of the genetic technique, such as limitations of the data and sources of error, are described.	Student has discussed realistic and relevant suggestions for the improvement and extension. Strengths and weaknesses of the genetic technique are discussed and provide evidence of a clear understanding of the ethical issues involved. The student demonstrates awareness of local/global citizenshsip.
Communicating	Presentation is unclear, making it difficult to understand the focus, process and outcomes. The understanding of the investigation is obscured by the presence of inappropriate or irrelevant information. There are many errors in the use of subject-specific terminology and conventions.	The report is not well-structured: the necessary information on focus, process and outcomes is missing or is presented in an incoherent or disorganized way. The use of subject-specific terminology and conventions is appropriate and correct. Any errors do not hamper understanding.	The presentation of the investigation is clear. Any errors do not hamper the understanding of the focus, process and outcomes. The report is well-structured and is clear. The report is relevant and concise, thereby facilitating a ready understanding of the focus, process and outcomes of the investigation.