Think Science! Judging Rubric for Years 7-10

Science Inquiry skill	Developing	Competent	Excelling
Questioning and predicting	• states a scientifically testable question and/or aim • presents some background information • proposes an hypothesis	• states a clear, scientifically testable question and/or aim • summarises some relevant scientific concepts that underlie the topic being investigated • proposes a testable hypothesis using some scientific knowledge	• states a clear, scientifically testable question and/or aim that involves the variables being investigated • summarises the context and relevant scientific concepts that underlie the topic being investigated • proposes a testable hypothesis which is supported by the research
Planning and conducting	• considers some safety concerns • identifies the independent and dependent variables, and attempts to identify variables to be controlled • outlines an experimental procedure • includes photos or video of the experimental set-up	• identifies risks and any ethical concerns, and describes safety measures taken • Identifies the independent and dependent variables and describes how they are measured, and identifies and controls other variables • describes a logical, valid and reproducible experimental procedure, that uses appropriate equipment • includes relevant photos or video of the experimental set-up and the performance of the investigation	• describes risks and any ethical concerns and explains the safety measures taken • identifies the independent and dependent variables and describes how they are measured, and explains the measures taken to control each of the other variables • describes a logical, valid and reproducible experimental procedure, that uses appropriate equipment, and ensures accurate and reliable measurements • includes relevant photos or video that show the experimental set-up, and clearly demonstrate how the equipment was used in performing the investigation
Processing, modelling and analysing	• creates a table to display relevant observations and measurements • uses a further representation of results, including diagrams, photos, graphs • identifies patterns and trends in data	• creates an appropriately labelled table to display relevant observations and accurate measurements with calculated means • uses further appropriate representation to display results, including diagrams, photos, graphs, models, mathematical relationships • describes patterns, trends and relationships in data, and identifies anomalies	• creates a well-organised and appropriately labelled table to display relevant observations and comprehensive accurate measurements with calculated means • uses further appropriate representation to clearly display results, including diagrams, photos, graphs, models, mathematical relationships • comprehensively describes patterns, trends and relationships in data, and identifies anomalies

Science Inquiry skill	Developing	Competent	Excelling
Evaluating	• formulates a conclusion that is supported by results	• formulates a clear conclusion that is supported by results, and relates it to the hypothesis	• formulates a clear, precise conclusion that is supported by results, and relates it to the hypothesis
	• relates an observed pattern, trend or relationship in results to a relevant science concept or theory	• explains the results using relevant science and scientific concepts	• comprehensively explains the results using relevant science and scientific concepts
	• identifies a real-life situation related to the investigation findings or states a relevant testable question for further investigation	• describes a real-life situation related to the investigation findings and suggests a relevant testable question for further investigation	• explains how the investigation findings are relevant to the real world and suggests relevant testable questions for further investigation
	• identifies a possible source of error or assumption in the investigation and suggests a modification to the investigation	• reflects on possible sources of error and assumptions in the investigation and suggests some valid improvements to the investigation	• reflects critically on the investigation and possible sources of error and assumptions, and proposes some valid improvements to the investigation
Communicating	• presenters generally heard and understood	• all presenters can be clearly heard and understood, and speak at a comfortable speed with minimum background noise	• all presenters can be clearly heard and understood, speak at a comfortable speed with minimum background noise, and maintain good eye contact with the audience
	• text, graphs, photos and videos are clear, and large enough to be seen.	• text, graphs, photos and videos are clear and large enough to be easily seen, with sufficient time for viewing.	• Concise text, relevant graphs, photos and videos are clear and large enough so all details can be easily seen with sufficient time for viewing
	• presentation showcases some parts of their investigation and is significantly shorter or longer than 5 min	• presentation is well-sequenced and engaging, showcases all parts of their investigation and is between 4 and 5 min in length	• presentation is well-sequenced and engaging, showcases all parts of their investigation, is between 4 and 5 mins in length, and is creatively produced

Rubric content follows the Australian Curriculum v9, 2022