

### Think Science! Judging Rubric for Years 7-8

Science Inquiry skill	Developing	Proficient	Excelling
<b>Questioning and predicting</b>	<ul style="list-style-type: none"> <li>states a question and/or aim that can be scientifically investigated</li> <li>identifies some relevant information</li> <li>proposes a testable hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>states a clear question and/or aim that can be scientifically investigated</li> <li>describes some scientific concepts that underlie the topic being investigated</li> <li>proposes a testable hypothesis and uses understanding of relevant science concepts to support the hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>states a clear, precise question and/or aim that can be scientifically investigated</li> <li>describes, in detail, the context and the main scientific concepts that underlie the topic being investigated</li> <li>proposes a testable and well-informed hypothesis, using detailed reasoning based on background research to support the hypothesis</li> </ul>
<b>Planning and conducting</b>	<ul style="list-style-type: none"> <li>considers some safety concerns</li> <li>identifies the independent and dependent variables, and attempts to identify variables to be controlled</li> <li>describes an experimental procedure which includes some actions that will contribute to a fair test</li> </ul>	<ul style="list-style-type: none"> <li>identifies and manages risks and any ethical concerns</li> <li>Identifies the independent and dependent variables and describes how they are measured, and identifies variables to be controlled.</li> <li>describes a logical and reproducible experimental procedure including measures that contribute to a fair test, and that uses equipment to generate data with precision</li> </ul>	<ul style="list-style-type: none"> <li>identifies and comprehensively manages risks and any ethical concerns</li> <li>identifies the independent and dependent variables and describes in detail how they are measured, and provides a detailed analysis of variables to be controlled.</li> <li>describes, in detail, a logical and reproducible experimental procedure, emphasising measures to ensure a fair test, and that uses equipment to generate data with precision</li> </ul>
<b>Processing, modelling and analysing</b>	<ul style="list-style-type: none"> <li>creates a table to display measured and processed data</li> <li>uses a further representation of results, including diagrams, photos, graphs</li> <li>identifies patterns and trends in data</li> </ul>	<ul style="list-style-type: none"> <li>creates an appropriately labelled table to display measured data and averages</li> <li>uses further appropriate representation to display results, including diagrams, photos, graphs, models, mathematical relationships</li> <li>clearly states suggested patterns, trends and relationships in data, and identifies anomalies</li> </ul>	<ul style="list-style-type: none"> <li>creates a well-organised and appropriately labelled table to display measured data and averages</li> <li>uses further appropriate representation to clearly display results, including diagrams, photos, graphs, models, mathematical relationships</li> <li>describes, in detail, patterns, trends and relationships in data, and identifies anomalies</li> </ul>

Science Inquiry skill	Developing	Proficient	Excelling
<b>Evaluating</b>	<ul style="list-style-type: none"> <li>relates an observed pattern, trend or relationship in results to a relevant science concept or theory</li> <li>identifies a real-life situation related to the investigation</li> <li>identifies a possible source of error in the investigation and suggests a modification to the method</li> <li>formulates a conclusion that is supported by results</li> </ul>	<ul style="list-style-type: none"> <li>explains observed patterns, trends and relationships in results with reference to relevant science concepts and theory</li> <li>describes a real-life situation related to the investigation or a further application of the research</li> <li>identifies possible sources of error and assumptions in the investigation and suggests some valid improvements to the investigation</li> <li>formulates a clear conclusion that is supported by results</li> </ul>	<ul style="list-style-type: none"> <li>comprehensively explains observed patterns, trends and relationships in results, with detailed reference to relevant science concepts and theory</li> <li>applies findings to describe real-life situations and further applications of the research</li> <li>identifies possible sources of error and assumptions in the investigation, describing their impact on the results, and suggests some valid improvements to the investigation</li> <li>formulates a clear, precise conclusion that is supported by results</li> </ul>
<b>Communicating</b>	<ul style="list-style-type: none"> <li>presents a presentation that showcases some parts of their investigation</li> <li>basic use of digital tools and presentation is significantly shorter or longer than 4 min</li> </ul>	<ul style="list-style-type: none"> <li>presents a well-sequenced and engaging presentation, which clearly showcases all parts of their investigation</li> <li>good use of digital tools and presentation is approximately 4 min</li> </ul>	<ul style="list-style-type: none"> <li>presents a well-sequenced, clear, concise, and very engaging presentation, which grabs audience attention, and clearly showcases and details all parts of their investigation</li> <li>excellent use of digital tools and presentation is approximately 4 min</li> </ul>

Rubric content follows the [Australian Curriculum v9, 2022](#)