| Level | Description |
| --- | --- |
| 5 | The student has provided **clear and convincing evidence** that they:* completed a scientific investigation with a **comprehensive** understanding of **fair testing\***
* had shown a **high level** of **originality** in the idea and/or **creativity** in the investigative methods
* have an **in-depth** **understanding** of the relevant **science concepts**\*
* collected **wide-ranging, relevant** background information to make **appropriate** **predictions**
* selected **suitable** materials and equipment to collect **relevant** and **sufficient** data
* recorded data and included appropriate **graphical displays** with or without the use of digital technologies
* **analysed data,** identified **detailed trends and relationships, s**uggested **highly plausible** explanations for the results and made **highly valid** conclusions
* **extensively** detailed the progress of the investigation in a logbook\*
* **acknowledged** the nature ofall assistance given in conducting and communicating the investigation\*
* completed a **well-structured and coherent** report, using language that reflects the student’s own understanding, and is appropriate for the intended audience\*
 |
|  4 | The student has provided **substantial evidence** that they:* **completed** a scientific investigation with a **thorough** understanding of fair testing
* had shown **originality and/or creativity** in the investigative methods
* have a **clear** understanding of the relevant **scientific concepts**\*
* Collected **relevant** background information to make an appropriate prediction
* Selected **suitable** materials and equipment to collect **relevant and sufficient** data
* recorded data and included appropriate **graphical displays** with or without the use of digital technologies
* **analysed data,** identified **trends and relationships,** suggested **plausible** explanations for the results and made **valid** conclusions
* **clearly** detailed the progress of the investigation in a logbook\*
* **acknowledged** all assistance given in conducting and communicating the investigation\*
* completed a **well-structured and coherent** report**,** using language that reflects the students own understanding, and is appropriate for the intended audience\*
 |
| 3 | The student has provided **evidence** that they:* **completed a** science investigation with a **reasonable** understanding of fair testing
* had shown **little originality** and/or **creativity** in the investigative methods
* had **some understanding** of the relevant science concepts\*
* collected some relevant background information to make a prediction
* selected **suitable** materials and equipment to collect **mostly relevant and sufficient** data
* recorded data in **reasonably appropriate** graphical displays with or without the use of digital technologies
* **analysed data,** identified **some trends and relationships,** suggested **adequate** explanations for the results, made **mostly valid** conclusions
* **reasonably** detailed the progress of the investigation in a logbook\*
* **acknowledged** all assistance given in conducting and communicating the investigation\*
* completed a **reasonably structured and coherent** report, with language used that reflects the students own understanding and is appropriate for the intended audience\*
 |
| 2 | The student has provided **evidence** that they:* completed a science investigation with **minimal understanding** of fair testing
* had shown **no** originality and/or creativity in the investigative methods
* had **limited** understanding of the relevant science concepts
* collected **little or no** relevant background information and made **no, or an inappropriate** prediction
* made **little attempt** to consider suitability of materials and equipment and collected **some** data
* recorded **some** data in graphical displays with or without the use of digital technologies
* conducted a **limited** analysis of data with **no plausible** explanations for the results and made **no** valid conclusions
* **did not** detail the progress of the investigation in a logbook.
* provided no acknowledgment of assistance given in conducting and communicating the investigation
* completed a report with **limited** structure, with language that reflects the students own understanding and is appropriate for the intended audience
 |
| 1 | The student has demonstrated that they:* completed a science investigation with **no understanding** of fair testing
* had shown **no** originality and/or creativity in the investigative methods
* had **no** understanding of the relevant science concepts
* collected **little or no relevant** background research and made **no, or an inappropriate**, prediction
* made **little attempt** to select suitable materials and equipment and collected **no relevant** data
* Recorded **no** data in graphical displays with or without the use of digital technologies
* Provided **no analysis** of data or explanation of results with **no valid conclusion**
* **did not** detail the progress of the investigation in a logbook
* provided no acknowledgment of assistance given in conducting and communicating the investigation
* did not write a report with the required structure for a scientific investigation
 |