



# STANSW Young Scientist Awards



## Scoring Rubric: Scientific Investigation, Years 3-6

Level	Description
4	<p><i>The student has provided clear and convincing evidence that he/she:</i></p> <ul style="list-style-type: none"> <li>completed a <b>well planned</b> scientific investigation that incorporated <b>fair testing</b></li> <li>showed <b>originality</b> in the idea and <b>creativity</b> in the investigative methods</li> <li>demonstrated <b>good understanding</b> of the <b>science concepts</b> related to the investigation</li> <li>gathered <b>relevant background</b> information</li> <li>made <b>appropriate predictions</b></li> <li><b>carefully selected materials</b> and equipment</li> <li><b>accurately</b> gathered experimental <b>data</b> in an <b>appropriate number of trials</b></li> <li><b>systematically recorded</b> data using <b>correct units</b></li> <li><b>analysed</b> data, suggesting <b>plausible explanations</b> for the results</li> <li>made <b>valid conclusions</b> and suggested <b>useful applications</b></li> <li>documented <b>each stage</b> of the investigative method in a <b>logbook</b></li> <li><b>communicated effectively</b> taking into account the purpose and the audience</li> <li><b>acknowledged</b> any assistance given</li> </ul>
3	<p><i>The student has provided substantial evidence that he/she:</i></p> <ul style="list-style-type: none"> <li>completed a <b>planned</b> scientific investigation that incorporated <b>some fair testing</b></li> <li>showed <b>some innovative</b> or <b>creative</b> aspects</li> <li>demonstrated <b>reasonable understanding</b> of the related <b>science concepts</b></li> <li>included <b>some relevant background</b> research</li> <li>made a <b>prediction</b></li> <li>selected <b>suitable materials</b> and equipment</li> <li>collected <b>meaningful</b> and <b>sufficient data</b></li> <li><b>correctly recorded</b> data</li> <li><b>analysed</b> the results and <b>discussed</b> possible reasons for them</li> <li>made a <b>valid conclusion</b></li> <li>included a <b>logbook detailing</b> the different stages of the investigation process</li> <li>used <b>appropriate</b> language to <b>communicate</b> with the intended audience</li> <li><b>acknowledged</b> any assistance given</li> </ul>
2	<p><i>The student has provided evidence that he/she:</i></p> <ul style="list-style-type: none"> <li>completed a scientific investigation that contained <b>elements of fair testing</b></li> <li>showed <b>little</b> or <b>no creativity</b></li> <li>set the investigation in <b>some sort</b> of <b>scientific context</b></li> <li>attempted to make a <b>prediction</b></li> <li>collected <b>first-hand data</b></li> <li><b>recorded some</b> data</li> <li>offered <b>sketchy explanations</b> for the data collected</li> <li>presented a <b>logbook</b> that was either <b>fragmented</b> or <b>too brief</b></li> <li>used <b>language</b> and formatting that did <b>not connect</b> with the intended audience</li> <li>did <b>not acknowledge</b> assistance given</li> </ul>
1	<p><i>The student has provided evidence that he/she:</i></p> <ul style="list-style-type: none"> <li>attempted an investigation with a <b>lack</b> of understanding of <b>fair testing</b></li> <li>demonstrated <b>minimal understanding</b> of the related <b>science concepts</b></li> <li>gathered <b>some data</b></li> <li>did <b>not</b> present the data <b>clearly</b></li> <li>offered explanations for results that could <b>not</b> be experimentally <b>supported</b></li> <li>did <b>not maintain</b> a suitable <b>logbook</b></li> </ul>