

Performance Indicators

Level 1: Achievement falls much below provincial standards.

Level 2: Achievement approaches provincial standards.

Level 3: Achievement meets provincial standards.

Level 4: Achievement surpasses provincial standards.

Performance Criteria	Level 1	Level 2	Level 3	Level 4
Initiating and Planning <ul style="list-style-type: none"> formulates scientific questions and makes predictions selects appropriate instruments locates resources that are relevant to research study 	Student needs help stating the problem or the question, hypothesis, and predictions, is not able to select equipment and find resources.	Student states a problem or question and an hypothesis, but not clearly. Student has some ability to select equipment and find resources.	Student's problem statement and hypothesis are clearly stated; effectively selects equipment and finds resources	Student's problem statement and hypothesis are very clear; selects equipment and finds the most appropriate resources consistently and effectively
Performing and Recording <ul style="list-style-type: none"> describes steps in clear order identifies variables keeps other factors constant follows safety rules suggests strategy for repeated trials records in clear, accurate diagrams summarizes observed data neatly 	Student does not have a clear idea of order or methods required, even with help from the teacher; follows safety rules with some reminders; has trouble with diagrams and summarizing data, unless guided by teacher.	Student applies lessons on each step of procedures with help from teacher or classmates; follows safety rules with few reminders; uses diagrams to support results; however, written data summaries are not clear.	Student applies most lessons on each step of procedures independently or with a few reminders from the teacher; usually follows safety rules; records data in clear diagrams and summarizes observed data.	Student works well with little advice from teacher or classmates; always acts safely and helps others follow rules; records data in writing and diagrams using correct form and high quality.



Plan Your own Investigation Rubric

(continued)

Performance Criteria	Level 1	Level 2	Level 3	Level 4
<p>Analyzing and Interpreting</p> <ul style="list-style-type: none"> analyzes data to determine whether it supports prediction identifies possible sources of error draws conclusions based on results and research findings that demonstrate an understanding of the experiment 	<p>Student needs help to identify major findings and supporting details; does not analyze data, identify sources of error, or draw a conclusion.</p>	<p>Student can state major findings but needs help to support conclusions; analyzes some data and identifies some sources of error; conclusion shows some understanding of the experiment.</p>	<p>Student states major findings and gives support clearly; states the problem and hypothesis very clearly; analyzes data and identifies sources of error; draws accurate conclusions.</p>	<p>Student states clear conclusions with detailed support from a variety of sources; provides a detailed analysis of data and identifies all sources of error; conclusions display an in-depth understanding of the experiment.</p>
<p>Communication</p> <ul style="list-style-type: none"> communicates procedures, results, and conclusions clearly using appropriate language gives references in proper form may use multi-media aids to support results uses and interprets appropriate graphs uses appropriate modes of representation (graphs and units of measurement) calculations are accurately and precisely represented 	<p>Student does not produce a meaningful report; information is not clearly represented; many errors are present; student does not create or interpret graphs.</p>	<p>Student produces a report in which some information is clearly represented; numerous errors are present; student creates and interprets graphs with support.</p>	<p>Student produces a meaningful report in which all information is clearly represented; some errors are present; graphs are appropriate and incorporated into report.</p>	<p>Student produces a thorough, interesting report in which all information is clearly represented with no errors; graphs are appropriate, and student interprets them fully.</p>

