|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Identifying Phenomenon to be investigated.**  | **1** | **2** | **3** | **4** |
| Students describe the phenomenon under investigation, questions to be answered, or design solution to be tested. | No statement of questions or problem. | Statement of questions or problem without any indication of a way to investigate. (Ex. Does the sun make plants grow?)  | Statement of question or problem to be investigated doesn’t include variables. (Ex. Does a plant grow better with more sunlight? )  | Statement of question or problem to be investigated includes variables to be tested or measured. (Ex: Does a plant that gets more sunlight grow faster than a plant that gets less sunlight?)  |
| **Identify evidence to answer question** | **1** | **2** | **3** | **4** |
| * Students collaboratively develop an investigation plan and describe the evidence to be collected.
 | Students have no plan or evidence.  | Students will collaboratively to create a plan but the plan lacks evidence and may not be complete or logical.  | Students will collaboratively create a plan that describes some evidence they will collect to answer the question or solve the problem. Plan may not be complete or in a logical order.  | Students will collaboratively create a complete and logical plan that describes what evidence they will collect to answer the question or solve the problem.  |
| * Students individually describe that the evidence will be relevant to the purpose of the investigation.
 | Students can’t identify evidence.  | Students individually can tell *some of the evidence* they are collecting but not why it will help answer the question. | Students individually can tell the evidence they are collecting but *not* why it will help answer the question.  | Students individually can tell why the evidence they are collecting will help them answer the question.  |
| **Planning for the Investigation** | **1** | **2** | **3** | **4** |
| * Students collaboratively develop a grade-appropriate investigation plan that details how the data will be indicated, collected, and/or measured, including number of trials.
 |  |  |  |  |
| * Students individually describe how the methods are relevant to the purpose of the investigation.
 |  |  |  |  |
| * When given an investigation plan, students individually identify how:
1. The data/evidence will be collected
2. The methods are relevant to the purpose of the investigation
 |   |  |  |  |
| **Collecting the Data** | **1** | **2** | **3** | **4** |
| * Students perform the investigation, collecting and recording data systematically.
 |  |  |  |  |