TYPICAL SEQUENCE OF COMPONENTS

Minimum Total Points = 16 (11 prompts)         Maximum Total Points = 19  (14 prompts)
(N = necessary components      *See standardized prompt and scoring guide                 All blank data tables are provided for student use)

SCENARIO
Ideally the template starts with the scenario of a novel investigation. The results can be initially presented in a table or as a combination of a table and pictorial. The purpose, the procedure, and the person or people performing the investigation should be clearly stated in the introduction.

Not all investigations will give the information in a table alone. Some investigations will give students pictures of objects to be measured (leaves, toy cars, etc.). Questions will then follow in a typical sequence described below.

<table>
<thead>
<tr>
<th>Performance Event COMPONENT</th>
<th>GLEs that may be addressed</th>
<th>NOTES</th>
<th>NO of ITEM PROMPTS</th>
<th>TOTAL POINT RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Measure (using manipulatives when appropriate)</td>
<td>IN.1.B5a: Make qualitative observations using the five senses&lt;br&gt;IN.1.B5b: Determine the appropriate tools and techniques to collect data&lt;br&gt;IN.1.B5c: Use a variety of tools and equipment to gather data….&lt;br&gt;IN.1.B5d: Measure length to the nearest centimeter, mass to the nearest gram, volume to the nearest milliliter, temperature to the nearest degree Celsius, weight to the nearest Newton&lt;br&gt;IN.1.B5f: Judge whether measurements and computation of quantities are reasonable</td>
<td>Questions may ask students to determine the proper tools to perform certain investigations</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sort and count (using manipulatives when appropriate)</td>
<td>IN.1.B5a: Make qualitative observations using the five senses&lt;br&gt;IN.1.B5b: Determine the appropriate tools and techniques to collect data&lt;br&gt;IN.1.B5e: Compare amounts/measurements&lt;br&gt;IN.1.B5f: Judge whether measurements and computation of quantities are reasonable</td>
<td>1</td>
<td>1-2</td>
</tr>
<tr>
<td>N</td>
<td>Performance Event COMPONENT</td>
<td>GLEs that may be addressed</td>
<td>NOTES</td>
<td>NO of ITEM PROMPTS</td>
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<tr>
<td>N</td>
<td>Record data in data table</td>
<td>IN.1.E5a: Communicate the procedures and results of investigations and explanations through: …data tables….</td>
<td>This may follow another investigation located later in the template.</td>
<td>1</td>
</tr>
</tbody>
</table>
| N      | Questions about data displayed in data table | IN.1.B5e: Compare amounts/measurements  
IN.1.B5f: Judge whether measurements and computation of quantities are reasonable  
IN.1.C5a: Use quantitative and qualitative data as support for reasonable explanations  
IN.1.C5b: Use data as support for observed patterns and relationships, and to make predictions to be tested | Students should be able to answer questions using data from the prompt or data table.                                                | 1-2                | 1-2 (1/item)       |
| N      | Complete bar/single line graph (title given, axes labeled with general description of independent and dependent variables) | IN.1.E5a: Communicate the procedures and results of investigations and explanations through …graphs…. |                                                                                                                                        | 1                  | 4                  |
| N      | Questions about data displayed in bar/single line graph | IN.1.B5e: Compare amounts/measurements  
IN.1.C5a: Use quantitative and qualitative data as support for reasonable explanations  
IN.1.C5b: Use data as support for observed patterns and relationships, and to make predictions to be tested  
IN.1.D5a: Evaluate the reasonableness of an explanation  
IN.1.D5b: Analyze whether evidence and scientific principles support proposed explanations | Students should be able to answer the questions using either the table or the graph.                                                | 1-2                | 1-2 (1/item)       |
| N      | Questions about experimental design | IN.1.A5b: Recognize the characteristics of a fair and unbiased test  
IN.1.A5c: Conduct a fair test to answer a question  
IN.1.A5d: Make suggestions for reasonable improvements or extensions of a fair test | (Questions may be asked after the new scenario)                                                                                       | 1-2                | 1-2 (1/item)       |
### ELEMENTARY PERFORMANCE EVENT TEMPLATE for 2007-2010 MAP

**New scenario (same theme) with additional data (may be in form of new chart, graph, or illustration)**

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<th>NOTES</th>
<th>NO of ITEM PROMPTS</th>
<th>TOTAL POINT RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Questions on data provided in prompt <em>(not previously asked elsewhere in )</em></td>
<td></td>
<td></td>
<td>1-2 (1/item)</td>
</tr>
<tr>
<td></td>
<td>IN.1.B5e: Compare amounts/measurements</td>
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<tr>
<td></td>
<td>IN.1.B5f: Judge whether measurements and computation of quantities are reasonable</td>
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<td>IN.1.C5a: Use quantitative and qualitative data as support for reasonable explanations</td>
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<td>IN.1.C5b: Use data as support for observed patterns and relationships, and to make predictions to be tested</td>
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<td></td>
<td>IN.1.D5a: Evaluate the reasonableness of an explanation</td>
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<td></td>
<td>IN.1.D5b: Analyze whether evidence and scientific principles support proposed explanations</td>
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<tr>
<td>N</td>
<td>Write a testable question related to the new scenario</td>
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<td>1</td>
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<tr>
<td></td>
<td>IN.1.A5a: Formulate testable questions…</td>
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<tr>
<td>N</td>
<td>Write an explanation (hypothesis)</td>
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<td>1</td>
</tr>
<tr>
<td></td>
<td>IN.1.A5a: Formulate testable … explanations (hypotheses)</td>
<td></td>
<td></td>
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<tr>
<td>N</td>
<td>Questions about experimental design <em>(not previously asked)</em></td>
<td></td>
<td>1-2 (1/item)</td>
<td></td>
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<tr>
<td></td>
<td>IN.1.A5b: Recognize the characteristics of a fair and unbiased test</td>
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<tr>
<td></td>
<td>IN.1.A5c: Conduct a fair test to answer a question</td>
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<td>IN.1.A5d: Make suggestions for reasonable improvements or extensions of a fair test</td>
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</table>
Generic Scoring Guide for Bar or Single Line Graphs, Grade 5

(10x10 grid provided with title given, axes labeled with general description of independent and dependent variables, with units if appropriate, spaces/lines provided for category labels)

Four Total Points:

First key element:
Bar graph: All categories to be graphed correctly labeled within bar spaces along horizontal graph

OR
Single-line graph: An appropriate number scale labeled along horizontal axis:
- numbers written on grid lines,
- numbers allow for plotting of all data,
- consistently scaled

Second key element:
All graphs: An appropriate number scale along vertical axis:
- numbers written on grid lines,
- numbers that allow all data to be plotted,
- consistently scaled

Third key element:
Bar graph: At least four bars correctly drawn (top line of each bar is well-defined)
Single-line graph: At least four points correctly plotted and connected by line

Fourth key element:
Bar graph: All five bars are correctly drawn (top line of each bar is well-defined)
Single-line graph: All five points correctly plotted and connected by line

Prompt reads:
- Complete the bar graph below, using the information from the data table.
  Be sure to do the following:
  - Finish labeling both axes with categories or a number scale.
  - Draw bars to represent the data, but do not color or shade inside the bars.
- or -
  Complete a single line graph below, using the information from the data table.
  Be sure to finish labeling both axes with a number scale.
ELEMENTARY PERFORMANCE EVENT TEMPLATE for 2007-2010 MAP

Complete the bar graph below using the information from the data table on page ___.

Be sure to do the following:
- Finish labeling both axes with categories or a number scale.
- Draw bars to represent the data, but do not color or shade inside the bars.

>Title is provided

Axis label and units provided

Axis label and units provided
Complete a single line graph below using the information from the data table on page ___. Be sure to finish labeling both axes with a number scale.

(Title is provided)

Axis label and units provided

Axis label and units provided