## Tool 1. Student-Designed Investigations with Checkpoints

<table>
<thead>
<tr>
<th>Investigators:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title or Description of Investigation</td>
<td>✓ Checkpoints</td>
</tr>
</tbody>
</table>

### 1. What is the testable question? [What makes this a “testable” question?] [OK to go on?]

- Based on past observations or prior knowledge:

### Investigation Plan

#### 2. Hypothesis (predicts what will happen or change and what will cause the change):

<table>
<thead>
<tr>
<th>Variable to measure or observe:</th>
<th>Variable(s) to control (keep the same):</th>
</tr>
</thead>
</table>

#### 3. List equipment, materials, or technology needed.

(Be specific—for example, two cups of water, a stopwatch, safety goggles)

#### 4. Describe the investigation (step-by-step procedures), including safety procedures. How many trials will you conduct? How will you control variables?

Briefly list procedures & person responsible

#### 5. Data: How will you record observations or measurements?

- Data table/chart, graph
- Science journal or log
- Labeled drawing(s)
- Photo or video
- Other?

What did you learn? What are your conclusions? Do the data support or refute the hypothesis? Did you adapt or change any methods during the investigation?

Did the investigation raise any new questions or claims for a future investigation?