

## Tool 1. Student-Designed Investigations with Checkpoints

<b>Investigators:</b>		<b>Date:</b>
<b>Title or Description of Investigation</b>		✓ <b>Checkpoints</b>
<b>1. What is the testable question?</b>	<b>What makes this a “testable” question?</b>	<b>OK to go on?</b>
Based on past observations or prior knowledge:		
<b>Investigation Plan</b>		<b>Feedback/Questions</b>
<b>2. Hypothesis (predicts what will happen or change and what will cause the change):</b>	<b>Variable to measure or observe:</b>	<b>Variable(s) to control (keep the same):</b>
<b>3. List equipment, materials, or technology needed.</b> (Be specific—for example, two cups of water, a stopwatch, safety goggles)		
<b>4. Describe the investigation (step-by-step procedures), including safety procedures. How many trials will you conduct? How will you control variables?</b>	Briefly list procedures & person responsible	
<b>5. Data: How will you record observations or measurements?</b>	<ul style="list-style-type: none"> <li>○ Data table/chart, graph</li> <li>○ Science journal or log</li> <li>○ Labeled drawing(s)</li> <li>○ Photo or video</li> <li>○ Other?</li> </ul>	
<b>What did you learn? What are your conclusions?</b> Do the data <i>support or refute</i> the hypothesis? Did you adapt or change any methods during the investigation?		
<b>Did the investigation raise any new questions or claims for a future investigation?</b>		