Developing a Scientific Explanation Checklist



	Explanation Criteria	Notes
	<u>The Claim</u>	
1.	Is a claim made in response to the original investigation question? (Is there a claim?)	
2.	Is the claim stated as a complete sentence, without beginning with yes or no?	
3.	Is the claim related to the question?	
4.	Is the claim scientifically correct?	
	Evidence (from the investigation)	
5.	Is the type of evidence appropriate for supporting the claim?	
6.	Is there sufficient evidence?	
7.	Is the evidence scientifically accurate?	
	Reasoning (linking the evidence to the claim using scientific facts and/or ideas)	
8.	Does the reasoning used in the explanation stand out to the reader – is it obvious?	
9.	Does the reasoning make a link between the evidence and the claim?	
10.	Are scientific facts and ideas used to describe why the evidence supports the claim?	
	Overall Explanation	
11.	Would someone who is not in your class or your group be able to read your explanation and understand how the investigation supports it? Would your explanation be meaningful to them, support their understanding of the investigation results?	

Adapted from: "FACT #12: Explanation Analysis" from: Keeley, Page; <u>Science Formative Assessment</u>; Thousand Oaks, California: Corwin Press; 2008; pages 79 – 82