

Chemical Connections Rubric

	4: Expert	3: Practitioner	2: Apprentice	1: Novice	Student self-reflection (comments and observations)
Shares science content knowledge (i.e., standards/objectives) to explain interrelationships between human actions and the environment.	A complex understanding of science content knowledge is displayed to demonstrate the interrelationships between human actions and the environment	A complete understanding of science content knowledge is displayed to demonstrate the interrelationships between human actions and the environment	A limited understanding of science content knowledge is displayed to demonstrate the interrelationships between human actions and the environment	Student does not demonstrate an understanding of science content knowledge based on human actions and the environment.	
Brings awareness to the problem and states the effects of pollution on natural resources.	A clear connection is made between the problem of pollution and the harmful results.	An adequate connection is made between the problem of pollution and the harmful results.	A limited connection is made between the problem of pollution and the harmful results.	No connection is made between the problem of pollution and the harmful results.	
Research data support recommendation(s) for safer alternatives.	Safer alternatives to the product are suggested, with an abundance of supporting information from science-content knowledge.	Safer alternatives are suggested, with supporting information from science-content knowledge.	Alternatives are suggested, but are not necessarily safer and are not supported by data.	No alternatives are suggested.	
Science content knowledge and skills are demonstrated while engaging in the EDP.	Blueprint-design sketches are complete and detailed. They include all necessary steps for construction of the prototype. Multiple trials were conducted throughout the EDP.	Blueprint-design sketches are complete. They include steps for construction of the prototype. Multiple trials were conducted throughout the EDP.	Blueprint-design sketches are not complete. They include some steps for construction of the prototype, but more were needed to conduct multiple trials throughout the EDP.	Blueprint-design sketches were incomplete. Necessary steps for construction of the prototype are not present.	
Effective communication with the United Nations (writing portfolio).	Information is presented in an effective manner that grabs and maintains the attention of the audience to support a full understanding of the solution.	Information is presented in an adequate manner that grabs and maintains the attention of the audience to support understanding of the solution.	Information is presented in an ineffective manner. There is limited support for understanding.	Information is presented ineffectively with no support.	
Teacher reflection (comments/feedback)					