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| Competency | Beginning | Emerging | Proficient | Advanced |
| Critical Thinking | I attempt to analyze information for context, consistency, or inconsistency. | I attempt to analyze information for context, consistency or inconsistency and sometimes evaluate or propose alternative explanations or rational. | I analyze information for context, consistency, and inconsistency, and often evaluate or propose alternative explanations or rational conclusions. | I logically analyze information for context, consistency, and inconsistency, and evaluate or propose alternative explanations and rational conclusions. |
| Innovative Problem Solving | I attempt to apply the design process to my work, but I struggle to develop workable original solutions to problems. | I occasionally succeed in applying the design process to my work and developing workable original solutions to problems. | I often succeed in applying the design process to my work and developing workable original solutions to problems. | I always succeed in applying the design process to my work and developing workable original solutions to problems. |
| Collaborative Learning | I struggle to actively and respectfully participate as a member of a team working to achieve a shared outcome. I struggle to work as both a leader or support member of a collaborative group. | I sometimes actively and respectfully participate as a member of a team working to achieve a shared outcome. I attempt to work as both a leader and support member of a collaborative group. | I often actively and respectfully participate as a member of a team working to achieve a shared outcome. I often work as both a leader and support member of a collaborative group. | I always actively and respectfully participate as a member of a team working to achieve a shared outcome. I am always comfortable as both a leader and as a support member of a collaborative group. |
| Resilience | I am rarely persistent and perseverant in acquiring knowledge and skills, embracing adaptation in multiple learning environments, or identifying alternative ways of achieving goals. | I am sometimes persistent and perseverant in acquiring knowledge and skills, embracing adaptation in multiple learning environments, or identifying alternative ways of achieving goals. | I am often persistent and perseverant in acquiring knowledge and skills, embracing adaptation in multiple learning environments, and identifying alternative ways of achieving goals. | I am always persistent and perseverant in acquiring knowledge and skills, embracing adaptation in multiple learning environments, and identifying alternative ways of achieving goals. |
| Effective Expression | I struggle to communicate complex thoughts, feelings, ideas, and understandings with exactitude, or in a manner that is engaging and appropriate to an audience. | I sometimes communicate complex thoughts, feelings, ideas, and understandings with exactitude, and in a manner that is engaging and appropriate to an audience. | I often communicate complex thoughts, feelings, ideas, and understandings with exactitude, and in a manner that is engaging and appropriate to an audience. | I always communicate complex thoughts, feelings, ideas, and understandings with exactitude, and in a manner that is engaging and appropriate to an audience. |

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| Science Content | Beginner | Emerging | Proficient | Advanced |
| Identification of Energy Types | I struggle to identify the type of energy involved in a step of the Rube-Goldberg machine. | I can identify 2 types of energy involved in our Rube-Goldberg machine. | I can identify most of the types of energy involved in our Rube-Goldberg machine. | I correctly identify all of the types of energy involved in our Rube-Goldberg machine. |
| Analysis of Struggles | I struggle to identify the causes of the problems we encountered in building our Rube-Goldberg machine. | I can identify a few of the causes of problems we encountered in building our Rube-Goldberg machine. | I can identify most of the causes of the problems we encountered in building our Rube-Goldberg machine. | I can identify all of the causes of the problems we encountered in building our Rube-Goldberg machine. |
| Application of Content | I struggle to apply the energy concepts to the Rube-Goldberg machine. | I can apply a few of the energy concepts to the Rube-Goldberg machine. | I can usually apply energy concepts to the Rube-Goldberg machine or to a new application. | I can clearly apply the energy concepts to the Rube-Goldberg machine or to new applications and predictions. |