teachersTryScience

TEACH Engineering Resources for K-12

RECYCLING RULES RUBRIC	**Excellent** 3	**Good** 2	**Satisfactory** 1	**Need Improvement** 0
New Vocabulary -- After the Activity				
Student can explain the term Materials Recovery Facility (MRF)	Explanation is clear, complete, and accurate.	Explanation is accurate but is slightly incomplete or slightly unclear.	Explanation is inaccurate or incomplete	Student does not attempt an explanation
Experimentation and Design - DurinStudent can identify and describe 4 different sorting/separation methods used at MRFsg the Activity	Explanations of all 4 methods are clear, complete, and accurate.	Explanations of most methods are clear, complete, and accurate.	Explanations of most or all methods are unclear, incomplete, or inaccurate.	Student does not attempt explanations
Student can describe why MRFs are important	Explanations of all 4 methods are clear, complete, and accurate.	Explanations of most methods are clear, complete, and accurate.	Explanations of most or all methods are unclear, incomplete, or inaccurate.	Student does not attempt explanations

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Experimentation and Design- During the Activity				
Student makes predictions for Trials 1-4	Student can predict what they think will happen during each trial, and convey why they think this. Predictions demonstrate scientific thinking.	Student can predict what they think will happen during each trial, and to a limited extent convey why they think this. Predictions demonstrate scientific thinking.	Student makes predictions but cannot articulate why they have made those predictions OR Predictions are not based on science.	Student does not make predictions
Student makes relevant observations during Trials 1-4	Student makes observations that can be used to support or refute the effectiveness of each method. Student clearly records these observations using words, pictures, etc.	Student makes some observations that can be used to support or refute the effectiveness of each method. Student records these observations using words, pictures, etc.	Student makes few observations that can be used to support or refute the effectiveness of each method. Student does a poor job of recording their observations.	
Student makes meaning of their observations from Trials 1-4	Student is able to reflect on their hypothesis and communicate why the results of their observations support or do not support the hypothesis. Student can make connections between their results and how different methods would be used at a MRF.	Student is able to reflect on their hypothesis but the communication of why the results of their observations support or do not support the hypothesis is incomplete. Student can make some connections between their results and how different methods would be used at a MRF.	Student is able to reflect on their hypothesis but cannot communicate why the results of their observations support or do not support the hypothesis. Student makes no connections between their results and how different methods would be used at a MRF.	Student makes no attempt to make meaning

Student design shows thought and scientific thinking	Student's MRF design is based on their results and the reasoning behind the design is well articulated	Student's MRF design has some connection to their results and the reasoning behind the design is fairly well articulated.	Student's design is not strongly related to their results and the reasoning behind the design is unclear	Student does not create a design