

Model Oil Pipeline Grading Rubric

Teacher Name: _____

Student Name: _____

CATEGORY	4	3	2	1
Construction -Materials	Appropriate materials were selected and creatively modified in ways that made them even better.	Appropriate materials were selected and there was an attempt at creative modification to make them even better.	Appropriate materials were selected.	Inappropriate materials were selected and contributed to a product that performed poorly.
Construction - Care Taken	Great care taken in construction process so that the pipeline is sturdy, functions well, and follows plans accurately.	Construction was careful and accurate for the most part, but 1-2 details could have been refined for a more functional product.	3-4 details could have been refined for a more functional product. Some evidence that a plan was developed and followed in the construction of the pipeline	Construction appears careless or haphazard. Many details need refinement for a strong or functional product.
Modification/Testing	Clear evidence of troubleshooting, testing, and refinements based on data or scientific principles. Students present well-thought out ideas afterwards of further potential refinement(s).	Clear evidence of troubleshooting, testing and refinements. Students present one idea afterwards of a further potential refinement.	Some evidence of troubleshooting, testing and refinements.	Little evidence of troubleshooting, testing or refinement.
Function	Pipeline functions extraordinarily well, holding up under atypical stresses. "Oil" flows easily through pipeline without any leaks.	Pipeline functions well, holding up under typical stresses. "Oil" flows through pipeline with up to one small leak OR oil flows, but not smoothly.	Pipeline functions pretty well, but deteriorates under typical stresses. Pipeline leaks oil OR there is a partial blockage.	Fatal flaws in function of pipeline with complete failure under typical stresses. Oil does not flow AND/OR pipeline leaks profusely AND/OR pipeline collapses.
Group Work	The group functioned exceptionally well. All members listened to, shared with, provided feedback, and supported the efforts of others. The group (all members) was almost always on task!	The group functioned pretty well. Most members listened to, shared with, provided feedback, and supported the efforts of others. The group (all members) was almost always on task!	The group functioned fairly well but was dominated by one or two members. The group (all members) was almost always on task!	Some members of the group were often off task AND/OR were overtly disrespectful to others in the group AND/OR were typically disregarded by other group members.