Building A Structure : Create a Volcano

Teacher Name: **Mrs. B** Student Name: _____

CATEGORY	**4**	**3**	**2**	**1**
Information Gathering	Accurate information taken from more than 5 sources in a systematic manner. 1 source must be from a book.	Accurate information taken from 3 to 5 sources in a systematic manner. 1 source must be from a book.	Accurate information taken from 3 or less sources but not systematically.	Information taken from only one source and/or information not accurate.
Scientific Knowledge	Explanations by all group members indicate a clear and accurate understanding of scientific principles underlying the construction and modifications.	Explanations by all group members indicate a relatively accurate understanding of scientific principles underlying the construction and modifications.	Explanations by most group members indicate relatively accurate understanding of scientific principles underlying the construction and modifications.	Explanations by several members of the group do not illustrate much understanding of scientific principles underlying the construction and modifications.
Construction - Care Taken	Great care taken in construction process so that the structure is neat, attractive and follows plans accurately.	Construction was careful and accurate for the most part, but 1-2 details could have been refined for a more attractive product.	Construction accurately followed the plans, but 3-4 details could have been refined for a more attractive product.	Construction appears careless or haphazard. Many details need refinement for a strong or attractive product.
3-D plate boundaries	Model contains accurate plate boundaries under Volcano	Model contains plate boundary under Volcano	Model mentions boundary but does not display it in model	Model fails to mention or display boundary in model
Function	Structure functions extraordinarily well, holding up under atypical stresses. Model closely resembles actual mountain and eruptions.	Structure functions well, holding up under typical stresses. Model resembles actual mountain and eruptions.	Structure functions pretty well, but deteriorates under typical stresses. Model erupts but lacks details.	Fatal flaws in function with complete failure under typical stresses. Model fails to erupt, lacks detail or is incomplete.

Written Report	Volcano report provides complete details on all of the following: Location in the world, Plate boundary mountain sits on, eruption history, type of material expelled from mountain and current activity status.	Volcano report provides complete details on most of the following: Location in the world, Plate boundary mountain sits on, eruption history, type of material expelled from mountain and current activity status.	Volcano report provides some details on most of the following: Location in the world, Plate boundary mountain sits on, eruption history, type of material expelled from mountain and current activity status.	Volcano report provides few details on some of the following: Location in the world, Plate boundary mountain sits on, eruption history, type of material expelled from mountain and current activity status.
Team work	Team members worked exceptionally well together. Everyone shared the workload evenly and the finished product is of excellent quality.	Team members worked well together. The workload was mostly shared and the finished product is very good in quality.	Team members worked together. The workload was unevenly shared and the finished product is good or very good in quality.	Team members did not work together. The workload was not shared and the finished product is good to poor in quality.
Completed on Time	Project was completed ahead of deadline.	Project was completed on the deadline.	Project remains unfinished or lacking in detail on the deadline.	Project required additional time after the deadline to be completed.
Use of Classtime	Team effectively used class time to work on project. Team stayed focused and on task during each class period.	Team used class time well to work on project. Team stayed focused and were mostly on task during each class period.	Team somewhat used class time to work on project. Team was unfocused and off task during each class period.	Team used class time ineffectively for project. Team was off task and required many redirections during each class period to keep them working.