Catapult Rubric

	Novice--1	Apprentice--2	Practitioner-3	Expert--4
Team selection X1	Two or three members in the group work together negatively.	The teacher is needed to assist with the formation of the group.	Two or three students select a group and work together cooperatively.	Two or three members choose to work together and include a student in the group with whom they have never worked. The group works together cooperatively.
Design X2	One member of the group plans the catapult design or the group chooses to reproduce the design provided.	The group plans the catapult, or adapts the given design but only one or two members are developing the design.	The catapult is well planned and agreed upon by all members of the group. The design is sketched.	Practitioner plus: o The sketch is detailed or computer generated.
Construction X2	The catapult has little or nothing to do with the sketch if it exists and only one member of the group worked on the construction.	The catapult has little to do with the original sketch if it exists. All members of the group worked on the construction.	The catapult is a good representation of the sketch and all members of the group are instrumental in the construction.	Practitioner plus one of the following: o Catapult is decorated to meet the time period. o Catapult is named and displayed.
Operation X2	The catapult does not fire, or breaks apart during operation.	The catapult is inconsistent in its operation.	The catapult works as designed.	Practitioner plus: o Catapult is sturdy. o Catapult can withstand numerous firings.
Cooperation X2	The group did not work well during any phase of the process: planning, construction, operation and the final tournament.	The group had some difficulty during the process: planning construction, operation and the final tournament.	The group worked well during the entire process: planning, constructing, and operating during the final tournament.	The group worked without incident during the entire process: planning, constructing, and operating during the final tournament.

Possible Points for Design and Build   36