Second Annual Hartford Public Schools S.T.E.M. Expo

Invention Projects PK-5 Judging Rubric*

Judge Number:

	Project Number	Grade	Invention Project Title	SCORING 10=Excellent 8=Very Good 6=Good 4=Fair 2=Needs Improvement						Comment
				Originality	Design Process	Invention Effectiveness	Practicality of Invention	Need for the Invention	Total	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Judging should be based on the following categories, weighted equally.

Originality of Design: How much creativity was used? How challenging was the problem? Is this a unique, unusual, or clever solution to the problem? What did the inventor do to find out if her or his idea was unique? This should yield an age-appropriate response: a young child might ask a number of people; an older child should explore catalogs, stores and related companies; a middle school student might search the internet or even a patent database.

Design Process: How well did the designer explain the steps taken from concept to implementation and were the steps logical? Was the process well documented in the designer's log book? (Young children may use pictures or dictate information to someone.) Did the child include a description of the problem or goal, resources used, obstacles or failures, reasons for choice of materials, final design, and testing (Flexibility expected from judge based on grade level)? Was credit given to those who helped? Did the student answer questions about the project appropriately?

Invention Effectiveness: Does the Invention solve the problem that was selected? Does it do what it is supposed to? Does it work even better than expected? Does it solve other problems too? Does the designer present all the product features effectively?

Practicality of the Invention: What advantages and disadvantages does the Invention have compared to existing applications or methods that might solve the same problems? Is the designer knowledgeable about these alternative solutions? How much thought was given to science, math, technology, and engineering education; ease of use, and choice of environment (visual appeal)?

Need for the Invention: How important is the problem solved by the Invention? Who benefits from it, many, few, or only the designer? Does it serve a disadvantaged group, like the handicapped, the elderly, or animals? Is the Invention more or less friendly to the user than currently available products?

**Adapted from the Connecticut Invention Convention Judging Sheet*