

CRITERIA FOR INVENTIONS

1. Your invention helps to solve a problem we have now or may have in the future, helps to make a task easier, or makes improvements upon a device already invented.

2. You will keep and turn in notes that detail every step you took in the process of your invention.

Make sure you include everything -- even all the mistakes and things you had to do over or change.

These notes will include all materials used, measurements, notes, drawings, directions for building it, modifications, and ideas that did not work. Turn in organized inventor's notes (i.e. in a folder).

3. You will build a prototype of your invention. (Scaled models will be acceptable.) You must also include detailed sketches of your invention with all parts clearly labeled.

4. You will create a trifold display board that includes the following:

A catchy name for your invention

Your name, room number, and grade

Purpose: Explain how and why your invention is useful.

Materials: List all materials used in the final product.

Procedure: List the steps taken to make your final invention.

Results: Explain how your final invention turned out, how it works, and if it works as you expected.

Conclusion: Reflect upon your invention. How might your product be marketed? Can you imagine how it might be improved upon in the future or other products that might be generated from your initial concept?

Adult Assistance: Clearly explain what part of the invention needed adult assistance.

References: Cite at least three sources you used to gather information: internet, books, magazines, newspapers, interview of a knowledgeable person, etc.]

Photos are optional, but they make a nice addition to the display board.



Vintage Magnet Science Fair Scoring Rubric for Inventions

Criteria for Oral Explanation:				
	4	3	2	Total Points
1. Knowledge about the problem the project intends to solve or how it improves on another product.	<ul style="list-style-type: none"> Extensive knowledge; is able to clearly explain the invention's purpose and rationale for making it. Knowledge reflects research done about related products and how this product is an improvement. 	<ul style="list-style-type: none"> Good understanding of the invention's purpose. Has some knowledge about other similar inventions. 	<ul style="list-style-type: none"> Demonstrates minimal understanding of invention's use or purpose. Has not done enough research to know about other related products and if this invention already exists or not. 	± 8 Points
2. Understanding of invention's purpose and operation.	<ul style="list-style-type: none"> Can describe every detail of product construction, testing, and modifications Can explain and defend the choice of materials used Gives credit for any adult assistance used during construction, but student clearly did the bulk of the work 	<ul style="list-style-type: none"> Can describe most of the details of construction, testing, and modifications Somewhat explains and defends choice of materials. Somewhat acknowledges construction help given. <u>Adult</u> did some work that should have been done by the student. 	<ul style="list-style-type: none"> Cannot explain construction process or does so poorly Does not know why certain materials were used Does not acknowledge help given or <u>adult</u> did the bulk of the work. 	± 12 Points
Criteria for Inventor's Notes:				
1. The Inventor's Notes:	<ul style="list-style-type: none"> Shows a sequential/chronological progression of designs The materials list is clear and complete The procedure for building the invention is explained in detail The method for operating the invention is explained in detail All drawings are clearly labeled 	<ul style="list-style-type: none"> Shows some designs or initial planning The materials list is mostly complete The procedure for building the invention is clear The method for operating the invention is somewhat explained Most of the drawings are labeled 	<ul style="list-style-type: none"> Does not show a process or development of designs Materials list is incomplete The procedure for building is not clear or complete The method for operating the invention is not understandable or is incomplete The inventor's notes are missing or unclear 	± 20 Points
Criteria for Trifold:				

1. Work may be typed or <u>hand written</u> .	<ul style="list-style-type: none"> Every component listed in the criteria chart is on the trifold. The work is neat and complete. (Title, Student I.D., Purpose, Materials, Procedure, Results, Conclusion, Adult Assistance, References.)	<ul style="list-style-type: none"> Most of the components listed in the criteria chart are on the trifold. 	<ul style="list-style-type: none"> There are several missing components on the trifold. The work is poorly executed, or the trifold is missing. 	± 4 Points
Criteria for Invention:				
1. The Invention	<ul style="list-style-type: none"> The prototype of the invention reflects a high degree of time and effort. 	<ul style="list-style-type: none"> The prototype of the invention is well made. 	<ul style="list-style-type: none"> The prototype of the invention is poorly executed. 	± 4 Points
				Total Possible Points: 48

Total points earned: _____

Note:

- In order to advance to the Science Fair Finals, the project must receive 43 points or above. Projects that receive a score of 2 in any subsection will be disqualified from advancing to the Science Fair Finals.

Does this project qualify to enter Vintage Science Fair Finals?

Yes No

Teacher Signature: _____