

Design and Construction Judging Sheet

Team Name: _____ Division: MS HS
 School _____

Scoring Rubric

Criteria	5	4	3	2	1
Understanding of Concepts	Design indicates a clear and accurate understanding of related scientific principles.	Design indicates an accurate understanding of related scientific principles.	Design indicates a relatively accurate understanding of related scientific principles.	Design indicates a somewhat accurate understanding of related scientific principles.	Design does not indicate an understanding of related scientific principles.
Logical Design	Much research was conducted, scientific principles were used in the aircraft design and an appropriate, effective airfoil was used.	Research was conducted, scientific principles were used and an appropriate airfoil was selected.	Some Research was conducted, some scientific principles were used and an airfoil was used.	Minimal Research was conducted, hardly any scientific principles were used and use of an airfoil was not apparent.	It is not apparent that research was conducted or that scientific principles or an airfoil were used.
Visual Appeal	The aircraft is attractive, visually creative, neatly constructed and well laid out.	The aircraft contains 3 of the four specified criteria.	The aircraft contains 2 of the four specified criteria.	The aircraft contains 1 of the four specified criteria.	The aircraft does not contain any of the specified criteria.
Quality of Construction	The aircraft uses appropriate materials, materials were carefully selected, overall appearance shows care and attention to detail, and construction is exceptional.	The aircraft contains 3 of the four specified criteria.	The aircraft contains 2 of the four specified criteria.	The aircraft contains 1 of the four specified criteria.	The aircraft does not contain any of the quality of construction criteria.
Construction Requirements	Aircraft leads are correctly constructed from the motor to the tip of one of the plane's wings.	X	X	X	Aircraft leads are not correctly constructed.
Use of Materials	All criteria for materials was followed.	X	X	X	Criteria for materials was not followed; aircraft can test but not compete.

Judges Scores

Criteria	Judge 1 Scores	Judge 2 Scores	Judge 3 Score
Understanding of Concepts			
Logical Design			
Visual Appeal			
Quality of Construction			
Construction Requirements			
Use of Materials			
TOTAL (Out of 30)			

Average Score _____

Use of Materials Criteria:

- Aircraft uses the required motor
- Aircraft does not exceed 36" (91cm) in length, width or height
- Aircraft contains no lighter than air devices
- Cargo does not provide lift increasing or drag reducing properties
- No commercial kits are used