

JUNIOR SOLAR SPRINT

2022 & 2023 OFFICIAL RATING FORM

MIDDLE SCHOOL

Judges: Using minimal (1-4 points), adequate (5-8 points), or exemplary (9-10 points) performance levels as a guideline in the rating form, record the scores earned for the event criteria in the column spaces to the right. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: an “adequate” score of 7 for an X1 criterion = 7 points; an “adequate” score of 7 for an X2 criterion = 14 points.) A score of zero (0) is acceptable if the minimal performance for any criterion is not met.

Go/No Go Specifications

- Before judging the entry, ensure that the items below are present; indicate presence with a check mark in the box.
- If an item is missing, leave the box next to the item blank and place a check mark in the box labeled ENTRY NOT EVALUATED.
- If a check mark is placed in the ENTRY NOT EVALUATED box, the entry is not to be judged.

- Documentation portfolio is present
- Model car with solar panel is present
- A decorated shoebox
- The model is safe to participate in the time trials and, if deemed appropriate, the semifinalist races
- The model meets all required specifications
- ENTRY NOT EVALUATED

DISPLAY AND MODEL (80 points)				Record scores in the column spaces below.
CRITERIA	Minimal performance	Adequate performance	Exemplary performance	
	1-4 points	5-8 points	9-10 points	
Display/Decorated Shoebox (X2)	The quality of the display is extremely poor and/or exceeds size requirements; the shoebox is not decorated and there is no creativity.	The display is adequately created and meets the size specifications; the shoebox is decorated and creative.	The display is exemplary, includes eye-catching details, and meets the size specifications; the shoebox is creatively decorated and shows exceptional originality.	
Model Design (X2)	The design of the solar model is poor and shows little effort.	The design of the solar model is adequate but not of exceptional quality.	The design of the solar model exhibits exceptional quality.	
Model Creativity/Originality (X2)	The solar model car design lacks creativity and originality; little effort is apparent; car is an exact, or nearly an exact replica of purchased kit.	The solar model car design demonstrates an adequate level of creativity and originality; at least one (1) modification has been made to the car.	The solar model car design shows exceptional creativity, originality, artisanship, and engineering.	
Model Construction (X2)	The solar model car lacks quality of construction.	The solar model car demonstrates adequate quality of construction.	The solar model car demonstrates exceptional quality of construction.	
DISPLAY AND MODEL SUBTOTAL (80 points)				

Record scores in the column spaces below.

DOCUMENTATION PORTFOLIO (50 points)			
CRITERIA	Minimal performance	Adequate performance	Exemplary performance
	1-4 points	5-8 points	9-10 points
Portfolio Components (X1)	A number of portfolio components are missing.	Most of the portfolio components are included, but the portfolio lacks overall quality.	The portfolio includes all required components; it is neat and properly organized; effort and quality are evident.
Project Log (X1)	The Project Log is lacking significant portions; it is messy and demonstrates lack of effort.	The Project Log is acceptable, with most information included.	The Project Log is complete and accurate; the presentation is neat and orderly; a great deal of effort is evident.
Design Drawings (X1)	Some drawings are missing and/or drawings are of poor quality.	Drawings are acceptable; all required views are shown.	Drawings are accurate and complete; all required views are present; rough sketches are included.
Design Details/ Components List (X1)	Several details of the model, such as model size, wheel size, and gear ratio are missing and/or are poor; the components list is very limited.	Most details of the model, such as model size, wheel size, and gear ratio are included; most components are included.	All details of the model, such as model size, wheel size, and gear ratio are present; all components are included.
Design Process Description (X1)	The design process description lacks detail and is poorly documented.	Most of the design process description is present.	All parts of the design process description are present.
DOCUMENTATION PORTFOLIO SUBTOTAL (50 points)			

Rules violations (a deduction of 20% of the total possible points for the above sections) must be initiated by the judge, coordinator, and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: _____

PRELIMINARY TOTAL (130 points)

RACE (60 points)							
Fastest 16 vehicles based on time trials							
1st	2nd	3rd	4th	5th & 6th	7th & 8th	9th – 12th	13th – 16th
60 Points	55 Points	50 Points	45 Points	40 Points	35 Points	30 Points	25 Points
RACE SUBTOTAL (60 points)							

Rules violations (a deduction of 20% of the total possible points for the above sections) must be initiated by the judge, coordinator, and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: _____



CAR BUILDER INTERVIEW (40 points)				Record scores in the column spaces below.
CRITERIA	Minimal performance	Adequate performance	Exemplary performance	
	1-4 points	5-8 points	9-10 points	
Car Builder Interview (X2)	The team shows very limited knowledge of (and has difficulty articulating) how the car was produced or decisions made during the production; the student exhibits a basic understanding of design elements and functionality, and the rationale is inconsistent or absent.	The team demonstrates some knowledge of the vehicle production and has adequate knowledge of some processes or reasoning behind the vehicle design.	The team shows competence and knowledge related to the design and production of the vehicle; the student is able to articulate "reasoning" behind the decisions made.	
Articulation (X2)	Communication of the design process is unclear, unorganized, and or illogical; leadership and/or 21 st century skills are not evident.	Communication of the design process is somewhat logical and clear; leadership and/or 21 st century skills are somewhat evident.	Communication of the design process is clear, concise, and logical; leadership and/or 21 st century skills are clearly evident.	
CAR BUILDER INTERVIEW SUBTOTAL (40 points)				
Rules violations (a deduction of 20% of the total possible points for the above sections) must be initialed by the judge, coordinator, and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____				
SEMIFINAL TOTAL (100 points)				
To arrive at the FINAL TOTAL score, subtract rules violation points, as necessary.			TOTAL (230 points)	

Comments:

I certify these results to be true and accurate to the best of my knowledge.

JUDGE

Printed name: _____ Signature: _____