Beal Bank
Dallas Regional Science and Engineering Fair
DRSEF

A brief guide to ISEF Judging

INTERVIEWS

Talk with student(s) at each project for about 8-10 minutes, one judge at a project at-a-time.
Use the ISEF scoring form as a guide. Here are some standard questions:

- Please spend a minute describing your project. (*Look at the board*).
- How did you get the idea?
- Describe the timeline for this project. (*Look at the notebook, if any*).
- What are the independent and dependent variables, what are the controls?
- How did you decide the number of trials to do?
- What obstacles or unexpected results did you encounter?
- (*Team projects*) Who did what and how did you apportion the tasks?
- On what basis did you reach your conclusion?
- What could be done to strengthen the work?

Tips:

- Look for evidence of laboratory, field or theoretical work, not just library research or a facility with gadgets.
- Interviews are the highlight of the students' fair experience and they've put in a lot of work. Do not negatively criticize the student; project weaknesses can be reflected in your scoring.
- Ask many questions to form an opinion of the project, rather than letting the student deliver a long prepared speech. But avoid grilling the student – be positive!
- Use phones to research more information on projects when conferring.

EVALUATION

Scoring: use the ISEF criteria provided. The criteria are different for engineering and science. Use scores as a guide to choosing winners in consultation with the other judges.

Multi-year Projects: They must have displayed the continuation Form 7, which you should consult. Only research conducted within the current year is to be evaluated.

Research Labs: If the project was conducted in an industrial or institutional setting, the student should have documentation displayed, typically Form 1C, to help you determine how much assistance was given.

Score ONLY on the quality of the project and the student's contribution to it.

Sample engineering scoresheet

		Low	Mid	High	Max
Research Problem	Practical Need	Not Described	Partly Described	Fully Described	10
	Criteria for Solution	Not Defined	Partly Defined	Fully Defined	
	Constraints	Not Explained	Partly Explained	Fully Explained	
Method	Alternatives	Not Explored	Partly Explored	Fully Explored	15
	Solution	Not Identified	Vaguely Identified	Clearly Identified	
	Prototype/Model	Not Developed	Partly Developed	Fully Developed	
Execution of Prototype	Intended Design	Not Demonstrated	Partly Demonstrated	Fully Demonstrated	20
	Testing Conditions/Trials	Very Narrow	Limited	Multiple	
	Skill and Completeness	Little Demonstrated	Somewhat Demonstrated	Well Demonstrated	
Creativity	In Above Criteria	Cookbook No New Ideas	Teacher Assigned Some Value Added	Student Initiated Innovative	20
Presentation	Poster	Illogical or Unreadable	Lacks supporting docs or some lack of clarity	Logical, readable, & supporting docs	10
	Interview	Poor Responses Basic Misunderstanding No Conclusion No Recognition of Impact No Future Ideas (TEAM) One Student Dominant	Some Vague Responses Basic Misunderstanding Misunderstanding Results Unawareness of Impact (TEAM) Uneven Contributions	Clear Responses Basic Understanding Understands Results Recognizes Impact Future Ideas (TEAM) All Members Involved	25

Sample science scoresheet

		Low	Mid	High	Max
Research Question	Purpose	Unclear	Lacks focus	Clear	10
	Contribution to Field	Not identified	Vague	Identified	
	Scientific Method	Not testable with	Partly Testable with	Testable with	
Method	Data Collection	Poorly designed	Some planning	Well-designed	15
	Variables and Controls	Not defined	Incomplete or Inappropriate	Defined and Appropriate	
Execution	Reproducibility	None Possible	Difficult	Good	20
	Data Collection & Analysis	Arbitrary	Incomplete	Systematic	
	Math Methods	Erroneous	Some Inappropriate	Appropriate & correct	
	Data Collected	None	Insufficient	Sufficient	
Creativity	In Above Criteria	Cookbook No New Ideas	Teacher Assigned Some Value Added	Student Initiated Innovative	20
Presentation	Poster	Illogical or Unreadable	Lacks supporting docs or some lack of clarity	Logical, readable, & supporting docs	10
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