

Rubrics to Grade or Score the Projects/Products for MRSM Tunas Saintis. These rubrics are developed by following the judging criteria from INTEL-ICEF Science Fair

Criteria		Scoring Guide Standards				
Criteria	Criteria breakdown	5 = Exemplary	4 = Proficient	3 = Competent	2 = Well developed	1 = Developing
Creativity/Originality in research questions	Question leads to effective & reliable way in solving authentic problems	Research questions lead to highly effective & highly reliable ways of solving authentic problems	Research questions lead to effective & reliable ways of solving authentic problems	Research questions partially lead to effective & reliable ways of solving authentic problems	Research questions does not lead to effective & reliable ways of solving authentic problems	Research questions are not specified or unclear.
	Question leads to new ways of data analysis/ its interpretation,/new ways of using instruments/design of new instruments	Research questions absolutely & convincingly lead to new gadgets or new ways of data analysis/ its interpretation,/new ways of using instruments/design of new instruments	Research questions lead to new ways of data analysis/ its interpretation,/new ways of using instruments/design of new instruments	Research questions partially lead to new gadgets or new ways of data analysis/ its interpretation,/new ways of using instruments/design of new instruments	Research questions does not convincingly lead to new ways of data analysis/ its interpretation,/new ways of using instruments/design of new instruments	Research questions doesn't lead to new ways of data analysis/ its interpretation,/new ways of using instruments/design of new instruments
Scientific Thought	Problem statement clarity, researchable, variables operationalized, research design/plan explained, have controls	Problem statements are clearly stated & researchable. Procedures, variables and controls are clearly explained.	Problem statements are stated & researchable. Procedures, variables and controls are explained.	Problem statements are partially stated & researchable. Procedures, variables and controls are partially explained.	Problem statements are unclear & not researchable. Procedures, variables and controls are vaguely explained.	Problem statements are not stated. Procedures, variables and controls are vaguely explained.
	Data collected sufficient, data limitation understood, investigation's relation to research in the field understood, need for further investigation understood, scientific literature utilized/cited	Data collected is extremely sufficient. Data limitation is well understood. The relation of this investigation to other investigations in the area & the needs for further investigation are clearly understood. At least 3 scientific literature was cited.	Data collected is sufficient. Data limitation is understood. The relation of this investigation to other investigations in the area & the needs for further investigation are understood. At least 2 scientific literature was cited.	Data collected is sufficient. Data limitation is understood. The relation of this investigation to other investigations in the area & the needs for further investigation are partially understood. At least 2 scientific literature was cited.	Data collected is partially sufficient. Data limitation is vaguely understood. The relation of this investigation to other investigations in the area & the needs for further investigation are vaguely understood. Only 1 scientific literature was cited.	Data collected is insufficient. Data limitation is not understood. The relation of this investigation to other investigations in the area & the needs for further investigation are not understood. No scientific literature was cited.
Thoroughness	Ability to complete investigation, confirm/validate conclusion via experiment replication, awareness of other approaches, time to complete investigation reasonable, aware of scientific literature related to investigation	Investigation was completed and the conclusion was confirmed/validated by more 3 than experimental replications. Awareness of other approaches is highly evident. The investigation was completed within reasonable time. Awareness of scientific literature related to investigation is highly evident.	Investigation was completed and the conclusion was confirmed/validated with 2 experimental replications. Awareness of other approaches is evident. The investigation was completed within reasonable time. Awareness of scientific literature related to investigation is evident.	Investigation was completed but the conclusion was confirmed/validated by only 1 experimental replications. Awareness of other approaches is partially evident. The investigation was completed within reasonable time. Awareness of scientific literature related to investigation is partially evident.	Investigation was completed but the conclusion was not confirmed/validated with experimental replications. Awareness of other approaches is minimally evident. The investigation was completed within reasonable time. Awareness of scientific literature related to investigation is minimally evident.	Investigation was not completed. Awareness of other approaches is not evident. Awareness of scientific literature related to investigation is not evident.
Skills	Ability to utilize required instruments, computational skills, observational skills, access to supervision, equipments	Investigations utilized more than the required instruments. Computational skills & observational skills are highly evident. Investigations performed without requiring supervision from anyone.	Investigations utilized the required instruments. Computational skills & observational skills are proficiently evident. Investigations performed with minimal supervision.	Investigations utilized the required instruments. Computational skills & observational skills are competently evident. Investigations performed with some supervision.	Investigations utilized the required instruments. Computational skills & observational skills are evident. Investigations performed with substantial supervision.	Investigations utilized few of the required instruments. Computational skills & observational skills are minimally evident. Investigations performed with maximum supervision.
Clarity	Ability to verbally explain & visually show the relationship between hypothesis/objectives, problem statement, procedures, results & conclusion	Verbal explanation & visual display of the investigation and the relationship between hypothesis/objectives, problem statement, procedures, results & conclusion are highly convincing and extremely coherent	Verbal explanation & visual display of the investigation and the relationship between hypothesis/objectives, problem statement, procedures, results & conclusion are proficiently convincing and coherent	Verbal explanation & visual display of the investigation and the relationship between hypothesis/objectives, problem statement, procedures, results & conclusion are competently convincing and coherent.	Verbal explanation & visual display of the investigation and the relationship between hypothesis/objectives, problem statement, procedures, results & conclusion are partially convincing and somewhat coherent.	Verbal explanation & visual display of the investigation and the relationship between hypothesis/objectives, problem statement, procedures, results & conclusion are not convincing and fragmented.
Teamwork	Ability to clearly outline each team member's role, contribution & involvement. Each member is able to show understanding of investigation	Each team member's role, contribution & involvement are clearly outlined and described. Each member is able to clearly show understanding of the whole investigation process & outcomes.	Each team member's role, contribution & involvement are outlined and described. Each member is able to show understanding of the whole investigation process & outcomes.	Each team member's role, contribution & involvement are outlined and described. Each member is able to show partial understanding of the whole investigation process & outcomes.	Each team member's role, contribution & involvement are partially outlined and described. Only few team members are able to show understanding of the whole investigation process & outcomes.	Each team member's role, contribution & involvement are vaguely outlined and described. The team is not able to show understanding of the whole investigation process & outcomes.