

TCEA Inventions Scoring Rubric

Judge #: _____

Team Name: _____

Invention Name: _____

Team #: _____

	MINIMAL	BASIC	ACCOMPLISHED	EXEMPLARY	Pts. Awarded
RESEARCH	1	2	3	4	
Identify Problem: Clarity of the problem throughout the project	unclear; few details	partially clear; details missing	mostly clear; detailed	clear; very detailed	
Problem Analysis: Extent to which the problem was studied and analyzed by the team	minimal study; no team analysis	minimal study; some team analysis	sufficient study and analysis by team	extensive study and analysis by team	
Current Solutions: Extent to which current or future solutions were analyzed by the team	minimal research; no team analysis	minimal research; some team analysis	sufficient research and analysis by team	extensive research and analysis by team	
PRESENTATION	1	2	3	4	
Display: Extent of effort put into presentation space organization, effectiveness, and cohesion	minimal effort	partial effort; minimal organization	more effort, mostly organized	engaging, imaginative, and well-organized	
Marketing: Strength of marketing plan and strategies (business cards, brochures, skit, commercial, video, website, social media)	minimal plan evident	plan includes 1-2 strategies	plan includes 3-4 strategies	clear and concise plan; includes 5+ pieces	
Delivery: Development and delivery by all members: knowledgeable, imaginative, organized, clear and loud	weak	emerging	competent	strong	
Explanation: Overall understanding of robot design and function with the ability to answer questions	none	some	most	all	
CONSTRUCTION	2	4	6	8	
Mechanical Design: Durability and locomotion of robot	fragile	somewhat stable	stable	solid	
Performance: Ability for robot to complete designed task(s) without intervention	none	some	most	all	
PROGRAMMING	2	4	6	8	
Program efficiency: Program is streamlined and understandable	excessive code; difficult to understand	inefficient code but understandable	appropriate code; easy to understand	streamlined and efficient code; easy to understand	
Sensors: Robot moves or acts as intended using mechanical and/or sensor feedback.	no mechanical/sensor feedback	feedback ineffective; frequent driver intervention	effective feedback, some driver intervention	robot moves/acts as intended w/o driver intervention	
Visuals: Evidence of programming progression in logbook and/or presentation	no evidence	minimal; no annotations	minimal; with annotations	3+ progressions with annotations	
Autonomy: Ability of robot to move or act as intended using mechanical and/or sensor feedback with minimal intervention	robot is controlled by remote device/app	autonomous, but frequent intervention	autonomous, but occasional intervention	autonomous and no intervention	
LOG BOOK	2	4	6	8	
Team Meetings: Effort evident in documentation of meetings with dates, work accomplished, and decisions made	no effort	little effort	clear evidence of meetings and scope of work, but not detailed	complete documentation, from project start to end	
Sketches: Detailed progression of robot evolution and robot construction (early designs, final designs, labeled, etc.)	none	minimal	competent	strong	
Judges Comments:				TOTAL (max 92)	
				Compliance of Rules (+20)	
				Final Score	

*Non-compliance of rules includes but is not limited to: inappropriate conduct during the competition and/or not adhering to stated rules; the 6 minute time and the 10 ft. x 10 ft. space.