

Your First Robot: Build Rubric						
Evaluation Criteria	Expert = 4	Proficient = 3	Emerging = 2	Novice = 1	Assessment	Comments
<b>Design &amp; Process Criteria</b>						
Clawbot Systems	Specified system(s) function(s) efficiently	Functioning specified system(s) exist(s)	Specified system(s) exist; partially function	Specified system(s) exist without function		
Design Process (documented in Idea Book as desired by teacher)	Design process utilized, documented creating enhanced efficiency	Design process utilized and fully documented	Design process utilized consistently	Some evidence that design process was utilized		
Utilization of Resources (materials and parts, Information and instructions, people, and time)	Resources used within constraints and efficiency maximized	Resources utilized to maximize efficiency	Evidence that some resources utilized meeting intended purpose	A few resources (e.g., materials and parts) utilized		
<b>Technical Criteria</b>						
Control System – Joystick-Motor interaction	Completely functional control system with all expected system behaviors	Consistently functional control system with some expected system behaviors	Functional, but inconsistent control system behaviors	Non-functional or incomplete control system behaviors		
Electrical Systems	Battery charged. Wire routing safe, efficient, & completely functional.	Battery charged. Wire routing safe & consistently functional.	Functional, but inconsistent (battery or wiring issues)	Non-functional or Incomplete (battery and wiring issues)		
Mechanical Systems (drivetrain, arm, claw)	Completely functional and consistent mechanical systems	Consistently functional mechanical systems	Functional, but inconsistent mechanical systems	Non-functional or incomplete/unsafe mechanical systems		
<b>Unifying Themes (This area emphasizes the Interaction of Science, Technology, &amp; Human Endeavor)</b>						
Communication (written, electronic and/or oral as defined by the teacher)	Sophisticated and highly efficient communication for stated audiences	Purposeful, consistent, effective communication	Purposeful, partially consistent communication	Communication very inconsistent and lacks purpose		
Teamwork	Teamwork that maximizes outcomes is evident	Team members define roles, goals, & work together	Team members partially define roles, goals, & work together	Participants function separately within a group		

*Rubric Adapted from Rubric and Evaluation Criteria for Standards-Based Robotics Competitions & Related Learning Experiences – TSA, 2005*

