

### New This Year

Major changes to the VEX IQ Awards appendix:

- Modified Excellence Award candidate identification process
- Updated the Design Award process
- Added 3-point Bonus in rubric for bound notebooks, further defined notebook content.
- Remove pre-submission requirement for Design at Worlds
- Remove pre-submission requirement for STEM Research at Worlds
- Changed eligibility requirements for STEM Research and Design Awards at Worlds
- Added Inspire Award (typically only used for Worlds)
- Added STEM Research and Design Award rubrics
- Added discussion of Student Centered Teams
- Added statement on required use of Award descriptions and judging procedures at qualifying events.

### Awards Overview

Teams should consider their season a success if they learned something new and had fun in applying their knowledge and skills to the VEX IQ Challenge. Events provide a great opportunity to share and recognize the accomplishments and contributions of the student participants!

This section details the full list of awards presented in the VEX IQ Challenge Program. Most local and regional events will offer a small subset of these awards, based on the number of teams at their event. The only event likely to present each and every one of these awards will be VEX Worlds, as warranted by the hundreds of teams participating. The awards presented at each event are chosen by the event planning committee with the help of their Regional Support Manager. Details on the judging process used to select award winners are available in the Judge Guide located at [roboticseducation.org/event-partners/event-partner-resources-documents/](http://roboticseducation.org/event-partners/event-partner-resources-documents/).

**Official events may not change award criteria from those listed below. Events not following the award criteria in this document will not qualify to higher level events. Judges at local and state/regional/provincial qualifying events must follow the judging process outlined in the official VEX IQ judge guide.**

**Student-Centered Teams:** The Robotics Education & Competition Foundation seeks to increase student interest and involvement in science, technology, engineering, and mathematics (STEM) by engaging students in hands-on sustainable and affordable curriculum-based robotics engineering programs across the U.S. and internationally. Judges play an important role in our efforts to ensure that our program remains student-centered. Teachers/Mentors/Parents providing guidance and helping students design, fix or program robots is acceptable. Adults doing the majority of the work on a robot, or working on a robot alone without students, is not acceptable, as there is obviously limited student learning and ownership taking place in such a situation.

Judges have the opportunity through observation and interviews to identify teams, schools and clubs that strive to keep their program student centered and that understand the purpose of the program is to enhance the learning process, not to win at all costs. Judges, with input from event staff, are instructed to identify teams that are not student-centered.

Examples of teams that are not student-centered may include:

- Robots built entirely by mentors.
- Identical robots on two or more teams (so called clone-bots).
- Adults who criticize students from alliance teams for poor performance, failure to perform optimally or who blame other teams for low scores rather than offering positive suggestions.

Judges are instructed not to reward teams that Judges have clearly identified as not student centered with any Judged awards.

**Standard Awards:** The following is a standard set of awards that will be offered at most events.

Standard Awards	
<b>Excellence Award</b>	Top All Around Program <i>(Robot Performance and Judged)</i>
<b>Teamwork Champion Award</b> <i>(2 teams)</i>	1st Place Teamwork Challenge Alliance <i>(Robot Performance)</i>
<b>Design Award</b>	Most effective and efficient robot design process
<b>STEM Research Project Award</b>	Most effective research project presentation
<b>Robot Skills Champion Award</b>	Top combined Programming and Driving Skills Challenge score <i>(Robot Performance)</i>
<b>Judges Award</b>	Recognition from Judges for special accomplishments

VEX Worlds and other large events may also offer some or all of the following awards. For a listing of the awards offered at your event and of the awards that qualify for advancement to championship events, please visit your event page at [robotevents.com](http://robotevents.com):

Other Robot Performance Awards	
Based on the team's performance in the Robot Challenges	
<b>Teamwork Finalist Award</b> <i>(2 teams)</i>	Each Team on the 2 <sup>nd</sup> Place Teamwork Challenge Alliance
<b>Teamwork 2<sup>nd</sup> Place Award</b> <i>(2 teams)</i>	Each Team on the 2 <sup>nd</sup> Place Teamwork Challenge Alliance at VEX Worlds
<b>Teamwork 3<sup>rd</sup> Place Award</b> <i>(2 teams)</i>	Each Team on the 3 <sup>rd</sup> Place Teamwork Challenge Alliance at VEX Worlds
<b>Robot Skills 2<sup>nd</sup> Place Award</b>	2 <sup>nd</sup> Place combined Programming and Driving Skills Challenge
<b>Robot Skills 3<sup>rd</sup> Place Award</b>	3 <sup>rd</sup> Place combined Programming and Driving Skills Challenge at VEX Worlds

Technical Judged Awards	
Based on the deliberations of a dedicated volunteer judging team	
<b>Amaze Award</b>	Amazing, well rounded, and top performing robot
<b>Build Award</b>	Sturdy, well-crafted robot
<b>Create Award</b>	Robot with a creative engineering solution
<b>Think Award</b>	Robot utilizes effective programming

## Other Judged Team Awards

<b>Energy Award</b>	Demonstrates extraordinary enthusiasm
<b>Inspire Award</b>	Team that inspires the judges with their STEM Research Project
<b>Sportsmanship Award</b>	Demonstrates respect and great enthusiasm

## Individual Awards

<b>Mentor of the Year Award</b>	Recognizes outstanding mentor
<b>Teacher of the Year Award</b>	Recognizes outstanding teacher
<b>Volunteer of the Year Award</b>	Recognizes outstanding program/event volunteer

## Online Challenge Awards

These Awards have a January deadline and are awarded at Worlds

VEX IQ Promote Award	Team with the best Online Challenge video submission
Girl Powered: In Her Words Storybook Challenge	Team with the best Girl Powered Challenge story submission
Robomatter VEX IQ Challenge Robot Virtual Worlds	Team with the best Robot Virtual Worlds submission
VEX Photo Challenge	Team with the best Photo submission
Texas Instruments Electronics Challenge	Team with the best electronics study
Dell Technologies Website Challenge	Team with the best Website submission

## Team Professionalism and Ethics

The REC Foundation considers positive, respectful, and ethical conduct to be an essential component of the VEX IQ Challenge. Ethics is an important part of every engineer's professional training and practice. When determining awards, Judges will consider the conduct of the team to include the students, adults, and mentors associated with the team.

## Excellence Award

The **Excellence Award** is the highest award presented in the VEX IQ Challenge. This award is presented to a team that exemplifies overall excellence in creating a high quality VEX robotics **program**. This team is a strong contender in numerous award categories. Excellence winners must have an Engineering Notebook and a STEM Research Project presentation. Key criteria:

- Design Award ranking
- STEM Research Project Award ranking
- Teamwork Challenge Qualification Matches ranking
- Robot Skills Challenge ranking
- Other Judged award rankings
- High quality VEX robotics program

Some events may offer two Excellence Awards, one for the top overall Elementary School team and one for the top overall Middle School team, if the event has at least ten (10) teams at each level.

## Excellence Award at VEX Worlds

At VEX Worlds, Excellence Awards will be offered at the Middle School and Elementary School levels. Only teams that have won an Excellence Award at an official state/regional/provincial/national championship event during the current competition year and have submitted their Engineering Notebook will be considered for the Excellence Award at VEX Worlds. Please note that if an individual team receives the Excellence Award at VEX Worlds, then the award is given to that team's school or organization, not just the single team. Schools or organizations that have won the Excellence Award at VEX Worlds in the previous three years will not be eligible for the Excellence Award at VEX Worlds.

## Design Award

The **Design Award** recipient demonstrates the ability to implement the most effective and efficient robot design process. Their Engineering Notebook and discussion with the Judges will demonstrate the team's ability to produce a quality robot with minimal adult assistance. Only teams that submit Engineering Notebooks are eligible for the Design Award. Key criteria:

- Engineering Notebook is a clear, complete, and organized document of the robot design process.
- Team demonstrates effective management of skills, time, and material resources.
- Students understand and explain how they developed an effective game strategy and robot design.
- Students demonstrate teamwork and effective communication skills.

## Design Award Rubric

Judges will use the Design Award Rubric to evaluate the teams' performance on the award criteria. The first part of the Design Award Rubric is used to evaluate the quality of a team's Engineering Notebook. The second part of the rubric is then used to evaluate the students' understanding and application of an effective robot design process, as demonstrated in their team pit interview with Judges. The Design Award Rubric is available in the Judge Guide and at:

[roboticseducation.org/event-partners/event-partner-resources-documents/](http://roboticseducation.org/event-partners/event-partner-resources-documents/).

## Design Award – Engineering Notebook

One of the primary missions of the VEX IQ Challenge is to help students acquire real world life skills that will benefit them in their academic and professional future. The Engineering Notebook is a way for teams to document how the VEX IQ Challenge experience has helped them to better understand the engineering design process while also practicing a variety of critical life skills including project management, time management, brainstorming, and teamwork. Bound notebooks are preferred by judges. Teams receive bound Engineering Notebook when they register. Instructions and examples are included in the front of the notebook.

Each notebook is created through a concerted effort by a team to document their design decisions. Large events may send a Design Award winner to a state or regional championship, so teams should start their notebooks early and update them often.

Engineering is an iterative process whereby students recognize and define a problem, brainstorm and work through various stages of the design process, test their designs, continue to improve their designs, and continue the process until a solution has been identified. During this process, students will come across obstacles, encounter instances of success and failure, and learn many lessons. It is this iterative process that students should document in their Engineering Notebook.

The Engineering Notebook provides an opportunity to document everything a team does during the design process. Students should include a number of items in their Engineering Notebook including: a table of contents, team meeting notes as they relate to the design process, design concepts and sketches, pictures, notes from competitions regarding observations that should be considered in the next iteration of their design, team members' observations and thoughts on their design, team organization practices as they relate to their design process, and any other documentation that a team finds useful as related to their robots design. The team should also document their project management practices including their use of personnel, financial, and time resources.

A good notebook would allow a person who is unfamiliar with the team's work to take over the robot design/construction based on a team's detailed design documentation.

The Engineering Notebook provided by the REC Foundation with team registrations includes hints on good notebook practices and gives examples of good practices. A bound quad-ruled notebook is the preferred format. You may use the notebook provided by VEX or purchase your own bound notebook from any one of many online sources. The notebook should never be edited. The team number should be on the cover. The notebook should be written in ink with errors crossed out using a single line. Pages should be numbered and entries should be dated in chronological order with each page signed or initialed by the students. Additional materials such as computer code or CAD drawings should be glued or taped into the notebook. Pages should never be removed from the Notebook even if they contain errors.

**Note to Teams:** Judges will not accept Electronic notebooks on lap tops, thumb drives, or cloud-based servers. The Design Rubric may be found in the Judges guide which is posted on the [Roboticseducation.org](http://Roboticseducation.org) website. Teams will be interviewed in their pit area during local and state competitions.

### **Design Award at VEX Worlds**

At VEX Worlds, teams must have been awarded the Design or Excellence Award at a state/regional/provincial/national event to be eligible to be considered for Design. Eligible teams will be contacted prior to VEX Worlds and asked to submit their Engineering Notebooks at check in. Teams with high quality Engineering Notebooks will be selected for Design Award interviews in the Team Pit Areas. Teams are not given scheduled sit down interviews for the Design Award at VEX Worlds.

### **STEM Research Project Award**

The **STEM (Science, Technology, Engineering, and Mathematics) Research Project Award** is presented to the team that shares the most effective STEM Research Project presentation. This presentation, as well as the follow-up discussion with Judges, effectively demonstrates the students' significant depth of understanding of their topic and research findings. The presentation will also highlight the students' work in sharing what they learned in an effective format. Key criteria:

- Identifies a challenge topic of interest that relates to the STEM theme for the season
- Completes research and collects evidence using reliable sources
- Demonstrates a well-organized and documented process to study and explain the research findings
- Describes how the research findings were applied to develop and test the solution
- Shares the solution in an effective and creative presentation
- Students demonstrate an understanding of the entire research process
- Students demonstrate teamwork and effective communication skills

Additional details on the STEM Research Project, including the STEM Research Project rubric, are available at: [roboticseducation.org/competition-teams/vex-iq-challenge/](http://roboticseducation.org/competition-teams/vex-iq-challenge/).

## STEM Research Project Award at VEX Worlds

Teams must have been awarded the Design, STEM, or Excellence Award at a state/regional/provincial/national event to be eligible to present a STEM Research project at VEX Worlds. STEM Research Project presentation schedules will be emailed to eligible teams the week of VEX Worlds. Teams should be sure the email contact listed with their team registration can be accessed during VEX Worlds.

## Judges Award

The Judges Award is presented to a team that the Judges determine is deserving of special recognition. Judges consider a number of possible criteria for this award, such as team displays of special attributes, exemplary effort and perseverance at the event, or team accomplishments or endeavors throughout the season that may not fit under existing awards, but are nonetheless deserving of special recognition.

## Robot Performance Awards

The **Teamwork Champion Award** is presented to each of the two teams on the winning alliance in the Teamwork Challenge Finals Matches.

The **Robot Skills Champion Award** is presented to the team with the highest combined Programming Skills Challenge and Driving Skills Challenge score. A team's combined score will be determined by adding their highest Programming Skills Challenge score and their highest Driving Skills Challenge score at a single event. Teams participating in only one of the two skills challenges will receive a zero score in the challenge in which they did not participate. Some events may choose not to offer this award.

The **Teamwork Challenge Finalists Award** is presented to each of two teams on the second place alliance in the Teamwork Challenge Finals Matches. Some events may not choose to give this award.

The **Teamwork Challenge 2<sup>nd</sup> Place Award** is presented to each of two teams on the second place alliance in the Teamwork Challenge Finals Matches at VEX Worlds.

The **Teamwork Challenge 3<sup>rd</sup> Place Award** is presented to each of two teams on the third place alliance in the Teamwork Challenge Finals Matches at VEX Worlds.

The **Robot Skills 2<sup>nd</sup> Place Award** is presented to the team with the second highest combined Programming and Driving Skills Challenge score. Some events may choose not to offer this award.

The **Robot Skills 3<sup>rd</sup> Place Award** is presented to the team with the third highest combined Programming and Driving Skills Challenge score. Typically, only VEX IQ Worlds will offer this award.

## Technical Judged Awards

These awards are Judged using the VEX IQ Challenge Awards Scoring Sheet, which is available at: [roboticseducation.org/competition-teams/vex-iq-challenge/](http://roboticseducation.org/competition-teams/vex-iq-challenge/).

The **Amaze Award** is presented to a team that has built an amazing, high-scoring robot that clearly demonstrates overall quality. Key criteria:

- Robot design is consistently high scoring
- Robot demonstrates a solid mechanical design and is robustly constructed to fulfill its designed task
- Robot programming is consistently effective and successful
- Students understand and explain how they worked together to develop their robot



The **Build Award** is presented to a team that has built a well-crafted and constructed robot. Key criteria:

- Robot construction is of high quality; robust, clean, and effective use of materials
- Robot efficiently uses mechanical and electronic components
- Robot is designed with a clear dedication to safety and attention to detail
- Robot demonstrates reliability on the field and holds up under competition conditions
- Students understand and explain how they worked together to develop their robot

The **Create Award** is presented to the team whose robot design incorporates a creative engineering solution to the design challenges of the season's game. Key criteria:

- Robot has a well-crafted, unique design solution, which demonstrates creative thinking
- Team has demonstrated a highly creative design process and methodology
- Team has committed to ambitious and creative approaches to solving the game challenge
- Students understand and explain how they worked together to develop their robot

The **Think Award** is presented to a team that has developed and effectively used quality program as part of their strategy to solve the game challenge.

Key criteria:

- All programming is cleanly written, well documented, and easy to understand
- Team has explained a clear programming strategy to solve the game challenge
- Team demonstrates their programming management process, including version history
- Students understand and explain how they worked together to develop their robot programming

## Other Judged Team Awards

These awards are Judged using the VEX IQ Challenge Awards Scoring Sheet, which is available at: [roboticseducation.org/competition-teams/vex-iq-challenge/](http://roboticseducation.org/competition-teams/vex-iq-challenge/).

The **Energy Award** is presented to a team that displays a high level of enthusiasm and passion at the event. VEX Worlds uses ballots for this award.

Key criteria:

- Team maintains a high level of excitement and energy throughout the event
- Team's passion for robotics enriches the event experience for others
- Students demonstrate teamwork and effective communication skills

The Vex IQ **Innovate Award** recognizes a team's ability to implement an effective and efficient robot design process. Their Engineering Notebook and discussion with the Judges will demonstrate the team's ability to produce a quality robot with minimal adult assistance. Only teams that submit Engineering Notebooks are eligible for the Innovate Award. This award will be given by judges to a top contender for the Design Award. This award will probably only be given at worlds.

Key criteria:

- Engineering Notebook is a clear, complete, and organized document of the robot design process.
- Team demonstrates effective management of skills, time, and material resources.
- Students understand and explain how they developed an effective game strategy and robot design.
- Students demonstrate teamwork and effective communication skills.

The **Inspire Award** is presented to a team that has inspired judges with their STEM Research Project presentation. This team will effectively communicate their passion for STEM and maintain a positive attitude throughout the presentation. The teams stem presentation will have impressed the judges. This award will most likely only be offered at VEX Worlds.

The **Sportsmanship Award** is presented to a team that has earned the respect and admiration of the volunteers and other teams at the event. VEX Worlds uses ballots for this award.

Key criteria:

- Team is courteous, helpful, and respectful to everyone at the event, on and off the field
- Team interacts with others on the game field in the spirit of friendly collaboration
- Team demonstrates respect and willingness to help event staff, other teams, and spectators
- Team demonstrates excitement and enthusiasm throughout the event

## Online Challenge Awards

The VEX IQ online challenge rules and judging criteria are located on the Online Challenge which is found at: <http://challenges.robotevents.com/>. Online challenge submissions are due in January.

## Individual Awards

The **Mentor of the Year** award is given to a mentor or engineer who is not a teacher and who has helped students achieve goals that were seemingly out of reach. This individual is a role model, a leader and an extraordinary mentor who helps show students new ways to expand their knowledge and solve problems in the worlds of STEM. The recipient of this award will be nominated by the students on their team with a written submission detailing how the mentor inspires, motivates and educates students in a positive, enthusiastic and challenging atmosphere. To be considered for this award at VEX Worlds, teams must pre-submit a 500-word essay through the VEX Worlds awards page at [robotevents.com/vexawards/](http://robotevents.com/vexawards/), which will be available from **February 1, 2018 until March 20, 2018**.

The **Teacher of the Year Award** is presented to a teacher who shows true leadership and dedication to his or her group of students. The winner of this award continually exceeds expectations to ensure a safe, enjoyable and educational experience for all students. The recipient of this award will be nominated by the students on their team with a written submission detailing how the teacher inspires, motivates and educates students in a positive, enthusiastic and challenging atmosphere. To be considered for this award at VEX Worlds, teams must pre-submit a 500-word essay through the VEX Worlds awards page at [robotevents.com/vexawards/](http://robotevents.com/vexawards/), which will be available from **February 1, 2018 until March 20, 2018**.

The **Volunteer of the Year Award** is presented to an event volunteer who demonstrates a commitment and devotion to their community, putting in many hours of hard work with persistence and passion to help make events happen.



Teams will share the results of their STEM Research Project with VEX IQ Challenge event Judges in a creative and effective four (4) minute presentation, including setup. Judges will then have up to four (4) minutes to ask questions of the team to learn more about their project.

**Team Name:** \_\_\_\_\_ **Team Number:** \_\_\_\_\_  Elementary  Middle **Judges:** \_\_\_\_\_

For details, review the STEM Research Project and Awards Appendix on [www.roboticseducation.org/vex-iq-challeng/viq-current-game/](http://www.roboticseducation.org/vex-iq-challeng/viq-current-game/)

**Directions:** Mark the descriptor that best describes the team’s performance for each criterion.

Criteria	Expert (3 points)	Proficient (2 points)	Emerging (1 point)	Points
Identifies a challenge topic of interest that relates to the STEM theme for the season	Challenge topic clearly identified, with a strong connection to the STEM theme for the season	Challenge topic identified, with some connection to the STEM theme for the season	Topic not identified and/or limited connection to the STEM theme for the season	
Completes research and collect evidence using reliable sources	Provides evidence of thorough research using 3-5 reliable and credible sources	Provides evidence of research using 1-3 reliable sources	Provides evidence from no reliable sources	
Demonstrates a well-organized and documented process to study/explain research findings	Demonstrates highly organized and well documented process to study and explain the research data	Demonstrates some organization and documentation of the project	Demonstrates little to no documentation of the project	
Describes how the research findings were applied to develop and test the solution	Demonstrates an in-depth understanding of the application of the research to develop and test the solution	Demonstrates some under-standing of the application of the research to develop and test the solution	Demonstrates little to no application of research to develop and test the solution	
Shares the solution in an effective and creative presentation	Presentation and visual aids provide clear, effective, and creative explanation of how solution was developed and how it works	Presentation provides adequate explanation of how the solution was developed and how it works	Presentation lacks detail needed to understand the team’s solution	
Students demonstrate an understanding of the research process	All students demonstrate mastery of the research process	Most students demonstrate some understanding of the research process	Students demonstrate little or no understanding of the research process	
Students demonstrate teamwork and effective communication skills	All Students demonstrate high levels of cooperation, courtesy, enthusiasm, confidence, accuracy and clarity	Students demonstrate some cooperation, courtesy, enthusiasm, confidence, accuracy and clarity	Students demonstrate limited cooperation, courtesy, enthusiasm, confidence, accuracy and clarity	
Describe the best features of this presentation and discussion with the Judges (continue on back of sheet):				<b>Total Points</b>
_____				
_____				

# Design Award Rubric

Team Name: \_\_\_\_\_ Team Number: \_\_\_\_\_  Elementary  Middle Judges: \_\_\_\_\_

For Design Award details, review the Awards Appendix on [www.roboticseducation.org/vex-iq-challeng/viq-current-game/](http://www.roboticseducation.org/vex-iq-challeng/viq-current-game/)

**Directions:** Mark the descriptor that best describes the team’s performance for each criterion.

The Engineering Notebook...					
Criteria	Expert (3 points)	Proficient (2 points)	Emerging (1 point)	Points	
Clear document of Robot Design Process	Identify the challenge(s)	Describes the challenge at the start of each design process iteration with words and pictures, and states the teams’ goals for accomplishing that challenge	Identifies the challenge at the start of each design cycle	Does not identify the challenge at the start each design cycle	
	Brainstorm solutions	Lists 3 or more possible approaches to the challenge with labeled diagrams	Lists 1-2 possible approaches to the challenge.	Does not list the results of the brainstorming sessions.	
	Select the best approach and plan	Explains why the selected approach was chosen and why the other alternatives were not chosen. Fully describes the plan	Explains why the selected approach was chosen. Mentions the plan	Does not explain why the selected approach was chosen	
	Build, Program and Test	Records the building, programming and test processes and the test results in such detail that someone outside the team could recreate the robot by following the steps in the notebook	Documents the key steps to build, program and test the robot and the key test results	Leaves out important information about building, programming and testing the robot	
	Repeat process steps, if needed	Contains a complete history of the design process iterations for the season that resulted in the current robot design, repeating the steps above for each iteration	Describes most of the design process iterations, including most of the steps for each iteration	Leaves out most of the design process iterations	
Complete and organized document of Robot Design Process	Contains Project and Team Assignments, Entries from team meetings, with goals, decisions and accomplishments, and recorders’ names or initials and dates. Indexed so that anyone can easily locate any needed information	Contains most of the information listed at left. Organized so that team members can locate most needed information	Leaves out important information and/or is poorly organized		
Team demonstrates effective management of skills, time, and material resources	Includes an overall project timeline against which progress is checked regularly as well as daily goals and accomplishments. Documents the assignments of each team member based on skills and availability.	Documents most daily goals and accomplishments and most team member assignments	Does not document the team’s management of key resources		
Describe the best features of this <b>Engineering Notebook</b> :				<b>Total Points</b>	
<hr/> <hr/>					
Total the number of points earned from Notebook ( <b>Add 3 pts for a bound notebook</b> & enter the number on page 2 of this rubric):					

*Rubrics are confidential judging documents and should not be returned to the team, coach, or Event Partner. Rubrics should be destroyed immediately after the Judge Advisor has recorded the winning team.*

Robot Design Interview				
Criteria	Expert <i>(3 points)</i>	Proficient <i>(2 points)</i>	Emerging <i>(1 point)</i>	Points
Engineering Notebook is a clear, complete, and organized document of the robot design process	Students can explain clearly the robot design process and how they documented their use of the process in their Engineering Notebook	Students can explain most aspects of the design process and how they documented their use of the process	Students can explain only limited aspects of the design process and/or how they documented their use of the process	
Team demonstrates effective management of skills, time, and material resources	Students can explain how team progress was tracked against an overall project timeline and how students were assigned to tasks based on their skills and availability	Students can explain how team progress was monitored and how students were assigned to tasks	Students cannot explain how team progress was monitored and/or how students were assigned to tasks	
Students understand and explain how they developed an effective game strategy and robot design	Students can describe multiple game strategies and robot designs that were considered, and they can fully explain how and why the current game strategy and robot design were selected	Students can describe at least two strategies and designs that were considered, and can explain how or why the current strategy or design were selected	Students can only describe the current strategy and design, or they cannot explain how and why the current strategy or design were selected	
Students demonstrate teamwork and effective communication skills	Students demonstrate high level of teamwork, fluency, and courtesy	Students demonstrate some teamwork, fluency, and courtesy	Students demonstrate limited teamwork, fluency, and courtesy	
Describe the best features of this <b>Robot Design Interview</b> :	<b>Total the number of points earned from Student Interview and Discussion:</b>			
	<b>Total the number of points earned from Notebook: (including bonus for bound notebook)</b>			
	<b>Total the number of points combined:</b>			

*Rubrics are confidential judging documents and should not be returned to the team, coach, or Event Partner. Rubrics should be destroyed immediately after the Judge Advisor has recorded the winning team.*