

Team Number: \_\_\_\_\_

School: \_\_\_\_\_

## 2015 Project Engineering Notebook Score Sheet

<b>Purpose: To document the process used to design, build, and test the robot (30 Points)</b>	<b>Possible Points</b>	<b>Score</b>
<b>RESEARCH PAPER (4 Points)</b>		
<ul style="list-style-type: none"> <li>▪ Correlation between game and how the science/technology is being used at a company/industry/research lab in the team's state or region</li> </ul>	<b>10</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ Any related information of game theme, such as history, famous inventor(s), or major milestones.</li> </ul>	<b>10</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ Creativity in linking game theme to appropriately related science content</li> </ul>	<b>10</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ Proper use of grammar and composition throughout paper, citations of sources used to gather information for paper, stayed within 2-5 page limit</li> </ul>	<b>10</b>	
<i>Comments:</i>		
<b>DESIGN PROCESS (17 Points)</b>		
<ul style="list-style-type: none"> <li>▪ <b>Implementation of the Engineering Design Process</b> Evidence that the engineering process was effectively used.</li> </ul>	<b>25</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ <b>Brainstorming Approaches</b> How well organized and productive was the brainstorming approach used? How well was the brainstorming approach documented?</li> </ul>	<b>25</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ <b>Analytical Evaluation of Design Alternatives</b> Use of analytical and mathematical skills in deciding upon and implementing design alternatives</li> </ul>	<b>25</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ <b>Offensive and Defensive Evaluation</b> Analysis of gaming strategies and design elements used to achieve team goals</li> </ul>	<b>25</b>	
<i>Comments:</i>		

<ul style="list-style-type: none"> <li>▪ <b>Software Design and Simulation (from additional scoresheet)</b> Evidence of custom software design vs default program; Demonstration of software design process; Evidence of use of simulation (e.g., Simulink) to verify correct operation of robot program; Consideration of good software design practices such as comments, naming conventions, design simplicity, modularity, portability, etc.</li> </ul>	<b>25</b>	
<i>Comments:</i>  (see Software Design and Simulation Scoresheet)		
<ul style="list-style-type: none"> <li>▪ <b>Safety</b> Evidence that safety training occurred and safe practices were followed to prevent students' misuse of tools and other devices/equipment that may result in personal injury or damage to property</li> </ul>	<b>20</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ <b>Support Documentation</b> CAD/other drawings, photos, team organization, meeting minutes, test results, etc. that support the main document (max 20 total pages)</li> </ul>	<b>25</b>	
<i>Comments:</i>		
<b>OVERALL QUALITY AND COMPLETENESS OF NOTEBOOK (9 Points)</b>		
<ul style="list-style-type: none"> <li>▪ <b>Organization and appearance</b> Table of contents, summary, page numbers, discussion of evaluation points, linkage to appendices</li> </ul>	<b>30</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ <b>Adherence to specifications</b> Standard binder, business font no smaller than 12 pt., double-spaced (single spaced ok in tables and outlines), 30 one-sided page limit for main section, 20 page limit for appendices, 1" margins, required cover information.</li> </ul>	<b>30</b>	
<i>Comments:</i>		
<ul style="list-style-type: none"> <li>▪ <b>Quality of content</b> Well written descriptions, clear photo labels, lack of extraneous material, etc.</li> </ul>	<b>30</b>	
<i>Comments:</i>		
<b>Total</b>	<b>300</b>	
	<b>÷10</b>	<b>÷ 10</b>
<b>Final score:</b>	<b>30</b>	