

3rd-12th Grade I ♥ Robots Rubric

Student ID: _____ Evaluator: _____ Total Score: _____/24

<u>Category</u>	0	1	2	3
Define the problem	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student thoroughly identifies a problem. 2) Student describes whom the problem affects. 3) Student explains why this problem should be solved or why the robot is important to an individual or society. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Student thoroughly identifies a problem. 2) Student describes whom the problem affects. 3) Student explains why this problem should be solved or why the robot is important to an individual or society. 	<p>Two of the following are true:</p> <ol style="list-style-type: none"> 1) Student thoroughly identifies a problem. 2) Student describes whom the problem affects. 3) Student explains why this problem should be solved or why the robot is important to an individual or society. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student thoroughly identifies a problem. 2) Student describes whom the problem affects. 3) Student explains why this problem should be solved or why the robot is important to an individual or society.
Background research	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student has conducted appropriate research to support his/her idea. 2) Student cites sources. 3) Student provides thorough explanations of research. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Student has conducted appropriate research to support his/her idea. 2) Student cites sources. 3) Student provides thorough explanations of research. 	<p>Two of the following are true:</p> <ol style="list-style-type: none"> 1) Student has conducted appropriate research to support his/her idea. 2) Student cites sources. 3) Student provides thorough explanations of research. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student has conducted appropriate research to support his/her idea. 2) Student cites sources. 3) Student provides thorough explanations of research.
Robot Requirements Brainstorm	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student identifies specific physical characteristics of the robot. 2) Student thoroughly explains the characteristics of the robot. 3) Student explains financial requirements for the robot. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Student identifies specific physical characteristics of the robot. 2) Student thoroughly explains the characteristics of the robot. 3) Student explains financial requirements for the robot. 	<p>Two of the following are true:</p> <ol style="list-style-type: none"> 1) Student identifies specific physical characteristics of the robot. 2) Student thoroughly explains the characteristics of the robot. 3) Student explains financial requirements for the robot. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student identifies specific physical characteristics of the robot. 2) Student thoroughly explains the characteristics of the robot. 3) Student explains financial requirements for the robot.
Prototype Design	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student develops a digital or physical robot prototype (drawings count). 2) Robot prototype description or design is thorough and detailed. 3) Robot prototype solves the problem identified in step one. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Student develops a digital or physical robot prototype (drawings count). 2) Robot prototype description or design is thorough and detailed. 3) Robot prototype solves the problem identified in step one. 	<p>Two of the following are true:</p> <ol style="list-style-type: none"> 1) Student develops a digital or physical robot prototype (drawings count). 2) Robot prototype description or design is thorough and detailed. 3) Robot prototype solves the problem identified in step one. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student develops a digital or physical robot prototype (drawings count). 2) Robot prototype description or design is thorough and detailed. 3) Robot prototype solves the problem identified in step one.

<p align="center">Prototype Test</p>	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student thoroughly explains possible problems/weaknesses of the robot. 2) Student thoroughly explains predicted strengths of the robot. 3) Student thoroughly describes how the robot prototype will be tested. 4) Student thoroughly describes how to improve the robot in the future. 	<p>One or two of the following is true:</p> <ol style="list-style-type: none"> 1) Student thoroughly explains possible problems/weaknesses of the robot. 2) Student thoroughly explains predicted strengths of the robot. 3) Student thoroughly describes how the robot prototype will be tested. 4) Student thoroughly describes how to improve the robot in the future. 	<p>Three of the following are true:</p> <ol style="list-style-type: none"> 1) Student thoroughly explains possible problems/weaknesses of the robot. 2) Student thoroughly explains predicted strengths of the robot. 3) Student thoroughly describes how the robot prototype will be tested. 4) Student thoroughly describes how to improve the robot in the future. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student thoroughly explains possible problems/weaknesses of the robot. 2) Student thoroughly explains predicted strengths of the robot. 3) Student thoroughly describes how the robot prototype will be tested. 4) Student thoroughly describes how to improve the robot in the future.
<p align="center">Communication</p>	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student exhibits above average technology skills. 2) Student communicates the engineering design process effectively. 3) Student presentation method is appropriate for grade. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Student exhibits above average technology skills. 2) Student communicates the engineering design process effectively. 3) Student presentation method is appropriate for grade. 	<p>Two of the following are true:</p> <ol style="list-style-type: none"> 1) Student exhibits above average technology skills. 2) Student communicates the engineering design process effectively. 3) Student presentation method is appropriate for grade. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student exhibits above average technology skills. 2) Student communicates the engineering design process effectively. 3) Student presentation method is appropriate for grade.
<p align="center">Originality and creativity</p>	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Student project idea is creative. 2) Student project idea is unique. (has not been done by another student; does not exist on the market) 3) Student project has a “wow” factor. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Student project idea is creative. 2) Student project idea is unique. (has not been done by another student; does not exist on the market) 3) Student project has a “wow” factor. 	<p>Two or three of the following is true:</p> <ol style="list-style-type: none"> 1) Student project idea is creative. 2) Student project idea is unique. (has not been done by another student; does not exist on the market) 3) Student project has a “wow” factor. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Student project idea is creative. 2) Student project idea is unique. (has not been done by another student; does not exist on the market) 3) Student project has a “wow” factor.
<p align="center">General</p>	<p>None of the following are true:</p> <ol style="list-style-type: none"> 1) Presentation has little to no grammatical or spelling errors. 2) Presentation is organized and easy to follow. 3) Presentation leaves the evaluator inspired or impressed. 	<p>One of the following is true:</p> <ol style="list-style-type: none"> 1) Presentation has little to no grammatical or spelling errors. 2) Presentation is organized and easy to follow. 3) Presentation leaves the evaluator inspired or impressed. 	<p>Two of the following are true:</p> <ol style="list-style-type: none"> 1) Presentation has little to no grammatical or spelling errors. 2) Presentation is organized and easy to follow. 3) Presentation leaves the evaluator inspired or impressed. 	<p>All of the following are true:</p> <ol style="list-style-type: none"> 1) Presentation has little to no grammatical or spelling errors. 2) Presentation is organized and easy to follow. 3) Presentation leaves the evaluator inspired or impressed.