

# Forward Education Lesson Rubrics

Lesson:	Student/Group:		
Building/Coding Approach:	<input type="checkbox"/> Use	<input type="checkbox"/> Modify	<input type="checkbox"/> Create

*Note: We recommend that you evaluate all students in the areas of “Real-World Application” and “Computer Science & Coding,” as well as the approach (Use, Modify, Create) they used to complete their project.*

*This rubric is designed for flexible evaluations. Depending on how many phases students were asked to complete (e.g., Modify & Create), leave the remaining areas blank (e.g. Use).*

Middle School				
4: Exemplary	3: Proficient	2: Developing	1: Novice	
<b>Real-World Application</b>				<b>Total</b>
Describes the real-world application of their project, using examples from the lesson and/or local contexts, with next steps to take action, including some career connections.	Describes the real-world application of their project, using examples from the lesson and/or local contexts and career connections.	Partially describes the connection to their project and its real-world application, with limited links to lesson concepts.	Struggles to describe the connection to their project and its real-world application.	
<b>Computer Science &amp; Coding</b>				<b>Total</b>
Fully describes (verbally or using code comments) the process of intentionally testing and debugging their code using correct terminology.	Describes (verbally or using code comments) the process of testing and debugging their code using some terminology.	Partially describes (verbally or using code comments) the process of testing and debugging their code using minimal terminology.	Struggles to describe (verbally or using code comments) a process of testing or debugging their code.	
Accurately uses visual tools (flowchart/algorithm) to describe their program and all of its functions.	Uses visual tools (flowchart/algorithms) to describe their program and several of its functions.	Struggles to use visual tools (flowchart/algorithms) to describe their program or one of its functions.	Does not use a visual tool (flowchart/algorithm) to describe their program.	
Code functions without errors, includes at least two of the following: nested loops, compound conditionals, combined operations, or simple functions.	Code functions with minimal errors and includes at least one of the following: nested loops, compound conditionals, combined operations, or simple functions.	Code partially functions with several errors, and includes at least one of the following: nested loops, compound conditionals, combined operations, or simple functions.	Code does not function, or does not include any of the following: nested loops, compound conditionals, combined operations, or simple functions.	

4: Exemplary	3: Proficient	2: Developing	1: Novice	
<b>Use - Understanding</b>				<b>Total</b>
Confidently describes both the program and physical model using correct terminology, explaining how the sensors react to their environment.	Describes the general outcome of the code using some terminology. Identifies how at least one sensor responds to its environment.	Runs the code and builds the model, but requires significant prompting to explain how it works, or cannot identify how sensors respond to its environment.	Runs the code and builds the model, but cannot explain how it works, or how sensors respond to their environment.	
<b>Modify - Tinkering</b>				<b>Total</b>
Makes and tests changes to their program or physical model using an intentional approach, describing their rationale and program outcome using correct terminology.	Makes changes to their program or physical model following a tutorial, describing the outcome of the change with some details and terminology.	Attempts to change the code or physical model, but struggles to describe the rationale or impact of their changes. Code or physical model may have errors which they have not troubleshooted.	Modifications are accidental or follow a peer's work without understanding the change.	
<b>Create - Application</b>				<b>Total</b>
Programs and builds a model to address the lesson's challenge, clearly linking it to the provided success criteria. Describes an intentional approach to their project build & code using correct terminology.	Programs and builds a simple model, describing how it meets at least two of the success criteria listed. Describes any challenges or troubleshooting encountered, using some terminology.	Attempts to program or build a simple model, but struggles to describe how it connects to the success criteria, or significant areas of their code do not function.	Creates a project that utilizes the kit but lacks clear logic; code is mostly a copy of previous lessons.	
<b>Total:</b>				