

# SCORING RUBRIC for Bridge Design Project

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Grade: \_\_\_\_\_

Project Title: \_\_\_\_\_

Please provide a copy of your original plan when ready to score, you need it to score Elements #1 and #2.

Element Scored	Score 4	Score 3	Score 2	Score 1
<b>1. Plan</b>	A detailed plan is available— <b>ALL</b> dimensions are clear and precise.	A complete plan is available— <b>1</b> dimension may not be clear or precise.	A partial plan is available— <b>2-3</b> dimensions may not be clear or precise.	A seriously incomplete plan is available— <b>3 or MORE</b> dimensions may not be clear or precise.
<b>2. Size of Components Match Plan Dimensions</b>	<b>ALL</b> components match plan perfectly.	<b>MOST</b> components match plan perfectly.	<b>SOME</b> components match plan perfectly.	<b>FEW or NO</b> components match plan perfectly.
<b>3. Project Function &amp; Proper Operation for Intended Use</b>	The project meets <b>ALL</b> required functions and/or operates properly.	The project has <b>ONLY 1</b> operational or function problem.	The project has <b>2</b> operational or function problems.	The project has <b>MORE THAN 2</b> operational or function problems.
<b>4. Design Based On Engineering Principles</b>	<b>ALL</b> components are based on sound engineering principles.	<b>AT LEAST 75%</b> of the components are based on sound engineering principles.	<b>AT LEAST 50%</b> , but not 75% of the components are based on sound engineering principles.	<b>FEWER THAN 50%</b> of the components are based on sound engineering principles.
<b>5. Aesthetic Quality</b>	The project has <b>ALL 3</b> of the following aesthetic elements: proportion, symmetry, and balance.	The project has <b>2</b> of the following aesthetic elements: proportion, symmetry, and balance.	The project has <b>1</b> of the following aesthetic elements: proportion, symmetry, and balance.	The project has <b>NONE</b> of the following aesthetic elements: proportion, symmetry, and balance.
<b>6. Joinery (Miter, Dovetail, Lap Joints etc.)</b>	<b>ALL</b> joints have tight matching fit with smooth surface transition.	<b>Most</b> joints have tight matching fit with smooth surface transition.	<b>Some</b> joints have tight matching fit with smooth surface transition.	<b>FEW OR NO</b> joints have tight matching fit with smooth surface transition.
<b>7. Glue Joints</b>	<b>ALL</b> joints are neat, even, and smooth with no visible drips or runs.	<b>MOST</b> joints are neat, even, and smooth with no visible drips or runs.	<b>SOME</b> joints are neat, even, and smooth with no visible drips or runs.	<b>FEW OR NO</b> joints are neat, even, and smooth with no visible drips or runs.
<b>8. Road Deck (Toy Car)</b>	A vehicle <b>COULD</b> travel unimpeded on a flat even surface.			A vehicle <b>COULD NOT</b> travel unimpeded on a flat even surface.
<b>9. Teacher Assistance Factor</b>	The student worked <b>INDEPENDENTLY</b> to complete the project.	The student worked independently with <b>MINIMAL</b> teacher assistance.	The student required <b>SOME</b> teacher assistance to complete the project.	The student required <b>SIGNIFICANT</b> teacher assistance to complete the project.

# SCORE SHEET: BRIDGE DESIGN PROJECT

Name: \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_ Grade: \_\_\_\_\_

Project Title: \_\_\_\_\_

ELEMENT BEING SCORED	SCORE
1. Plan	
2. Size of Components Match the Plan Dimensions	
3. Project Function and/or Proper Operation for Intended Use	
4. Design Based On Engineering Principles	
5. Aesthetic Quality	
6. Joinery (Miter, Dovetail, Lap Joints, Mortise, Tenon, etc.)	
7. Glue Joints	
8. Road Deck	
9. Teacher Assistance Factor	
Total number of points:	
Divide by the number of elements scored	<b>36</b>
Multiply by	100
<b>Earned Grade:</b>	