		Ci		ir Metal Shop Rub			
			Workn	nanship			
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Square	>90% of the project is level/square	89-80% of the project is level/square	79-70% of the project is level/square	69-60% of the project is level/square	<59% of the project is level/square	X2	
Weld Quality	Uniform bead profile, feathering good penetration - No signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	Mostly uniform bead profile and penetration of weld - Few signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	Some uniform beads, and penetration of weld - Some signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	Few uniform beads, and penetration of weld - Many signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	No uniform beads, and penetration of weld - Signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	X3	
Fabrication	Good joints and fit-up. No sharp edges, poor fit up, and/or rough torch cuts	Most joints and fit-up are good. Few sharp edges, poor fit up, and/or rough torch cuts	Some joints and fit-ups are good. Some sharp edges, poor fit up, and/or rough torch cuts	Few joints and fit-ups are aligned. Many sharp edges, poor fit up, and/or rough torch cuts	Joints and fit-up are not aligned. Sharp edges, poor fit up, and/or rough torch cuts	X2	
Grinding	No signs of excessive grinding or lack of proper grinding	Few signs of excessive grinding or lack of proper grinding	Some signs of excessive grinding or lack of proper grinding	Many signs of excessive grinding or lack of proper grinding	Excessive grinding or lack of proper grinding	X1	
Paint Prep &	Slag and	Slag and	Slag and	Slag and	Slag and		

Calaveras County Fair Metal Shop Rubric

Finish	buckshot removed, no body filler. Uniform paint coating with no runs.	buckshot mostly removed, no body filler. Uniform paint coating with few runs.	buckshot some removed, some body filler. Uniform paint coating with some runs.	buckshot needs to be removed, use of body filler. Paint coating is not uniform, many runs.	buckshot not removed, use of body filler. Paint coating is not uniform, and has a lot of runs.	X1	
Notes:						Total:	/45
			CNC and P	rogramming			
Machining	No signs of inconsistent countersink or counterbore. No signs of machining defects (wrong temperature, burrs, chatter, etc)	Few signs of inconsistent countersink or counterbore. Few signs of machining defects (wrong temperature, burrs, chatter, etc)	Some signs of inconsistent countersink or counterbore. Some signs of machining defects (wrong temperature, burrs, chatter, etc)	Many signs of inconsistent countersink or counterbore. Many signs of machining defects (wrong temperature, burrs, chatter, etc)	Many signs of inconsistent countersink or counterbore. Many signs of machining defects (wrong temperature, burrs, chatter, etc) to the point it is distracting	X1	
Notes:						Total:	/5
			Design and	d Materials			
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Materials	Materials correctly sized for the project (not over or undersized for the load)	Materials mostly the correct size for the project (not over or undersized for the load)	Some materials not correctly sized for the project (over or undersized for the load)	Many materials not correctly sized for the project (over or undersized for the load)	Materials not correctly sized for the project (over or undersized for the load)	x2	

Notes:						Total:	/40
	Project is practical and materials are functional (materials are cost effective for the project)	Project is mostly practical and materials are functional (materials are mostly cost effective for the project)	Project is somewhat practical and materials are functional (materials are somewhat cost effective for the project)	Project is slightly practical and materials are functional (materials are slightly cost effective for the project)	Project is not practical and materials are not functional (materials are not cost effective for the project)	x2	
	Project design supports the intended purpose of the project. Project is original, attention to detail, contains original ideas, artistic	Project design mostly supports the intended purpose of the project. Project is mostly original, attention to detail, contains original ideas, artistic	Project design somewhat supports the intended purpose of the project. Project is somewhat original, attention to detail, contains original ideas, artistic	Project design slightly supports the intended purpose of the project. Project is slightly original, attention to detail, contains original ideas, artistic	Project design does not supports the intended purpose of the project. Project is slightly original, attention to detail, contains original ideas, artistic	x2	
	Screws and bolts coating compatible with the project. Used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating compatible with most of the project. Mostly used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating are somewhat compatible with the project. Some used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating slightly compatible with the project. Few used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating are not compatible with the project. Not used correctly (wrong size for the project, excessively protruding from the project).	x2	

	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Size, Scope, Complexity	Uses multiple (5+) skills and processes	Uses many (3-4) skills and processes	Uses some (2-3) skills and processes	Uses little (1-2) skills and processes	Uses no skill and processes	x1	
Sophistication	Intricate, technical and more difficult to build (appropriate for age)	Mostly intricate, technical and difficult to build (Mostly appropriate for age)	Somewhat intricate, technical and somewhat difficult to build (Somewhat appropriate for age)	Slightly intricate, technical and not very difficult to build (Slightly appropriate for age)	Simple, not technical and not difficult to build (Not appropriate for age)	x1	
Notes:						Total:	/10

		c		air woodshop Rubr nanship	it.		
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Square	>90% of the project is level/square	89-80% of the project is level/square	79-70% of the project is level/square	69-60% of the project is level/square	<59% of the project is level/square	x2	
Material Preparation	All faces and edges have been planed, joined and sanded if needed. All parts are a consistent thickness.	Most faces and edges have been planed, joined and sanded if needed. Most parts are a consistent thickness.	Some faces and edges have been planed, joined and sanded if needed. Some parts are a consistent thickness.	Few faces and edges have been planed, joined and sanded if needed. All parts are a consistent thickness.	No faces and edges have been planed, joined and sanded if needed. No parts are a consistent thickness.	x2	
Fabrication	Good joints and fit-up. No sharp edges, poor fit up, and/or rough torch cuts	Most joints and fit-up are good. Few sharp edges, poor fit up, and/or rough torch cuts	Some joints and fit-ups are good. Some sharp edges, poor fit up, and/or rough torch cuts	Few joints and fit-ups are aligned. Many sharp edges, poor fit up, and/or rough torch cuts	Joints and fit-up are not aligned. Sharp edges, poor fit up, and/or rough torch cuts	x2	
Gluing	All joints are glued properly and sufficiently. There are no visible glue marks.	Most joints are glued properly and sufficiently. There are few visible glue marks.	Some joints are glued properly and sufficiently. There are some visible glue marks.	Few joints are glued properly and sufficiently. There are many visible glue marks.	No joints are glued properly and sufficiently. There are many visible glue marks.	x1	
Sanding	Everything was sanded perfectly.	Most of the project was sanded well.	Some of the project was sanded well.	Few parts of the project are sanded well.	Needs to be sanded.	x1	
Paint Prep & Finish	Uniform paint coating with no	Uniform paint coating with few	Uniform paint coating with	Paint coating is not uniform,	Paint coating is not uniform, and		

Calaveras County Fair Woodshop Rubric

	runs. Stain is applied evenly with no splotches.	runs. Stain is applied mostly evenly with few splotches.	some runs. Stain is applied somewhat evenly with some splotches.	many runs. Stain is not applied evenly with many splotches.	has a lot of runs. Stain is not applied evenly, causing discoloration.	xl	
Notes:						Total:	/45
			CNC and P	rogramming			
Machining	No signs of inconsistent countersink or counterbore. No signs of machining defects (planer stripes and snipes, tears around corners, etc)	Few signs of inconsistent countersink or counterbore. Few signs of machining defects (planer stripes and snipes, tears around corners, etc)	Some signs of inconsistent countersink or counterbore. Some signs of machining defects (planer stripes and snipes, tears around corners, etc)	Many signs of inconsistent countersink or counterbore. Many signs of machining defects (planer stripes and snipes, tears around corners, etc)	Many signs of inconsistent countersink or counterbore. Many signs of machining defects (planer stripes and snipes, tears around corners, etc), to the point it is distracting	X1	
Notes:						Total:	/5
			Design and	d Materials			
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Materials	Materials correctly sized for the project (not over or undersized for the load)	Materials mostly the correct size for the project (not over or undersized for the load)	Some materials not correctly sized for the project (over or undersized for the load)	Many materials not correctly sized for the project (over or undersized for the load)	Materials not correctly sized for the project (over or undersized for the load)	x2	

Fasteners	Screws and bolts	Screws and bolts	Screws and bolts	Screws and bolts	Screws and bolts		
	coating compatible with the project. Used correctly (right size for the project, not excessively protruding from the project).	coating compatible with most of the project. Mostly used correctly (right size for the project, not excessively protruding from the project).	coating are somewhat compatible with the project. Some used correctly (right size for the project, not excessively protruding from the project).	coating slightly compatible with the project. Few used correctly (right size for the project, not excessively protruding from the project).	coating are not compatible with the project. Not used correctly (wrong size for the project, excessively protruding from the project).	x2	
Creativity/Desig n	Project design supports the intended purpose of the project. Project is original, attention to detail, contains original ideas, artistic	Project design mostly supports the intended purpose of the project. Project is mostly original, attention to detail, contains original ideas, artistic	Project design somewhat supports the intended purpose of the project. Project is somewhat original, attention to detail, contains original ideas, artistic	Project design slightly supports the intended purpose of the project. Project is slightly original, attention to detail, contains original ideas, artistic	Project design does not supports the intended purpose of the project. Project is slightly original, attention to detail, contains original ideas, artistic	x2	
Practicability	Project is practical and materials are functional (materials are cost effective for the project)	Project is mostly practical and materials are functional (materials are mostly cost effective for the project)	Project is somewhat practical and materials are functional (materials are somewhat cost effective for the project)	Project is slightly practical and materials are functional (materials are slightly cost effective for the project)	Project is not practical and materials are not functional (materials are not cost effective for the project)	x2	
						Total:	/40
			Diffi	culty			

	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Size, Scope, Complexity	Uses multiple (5+) skills and processes	Uses many (3-4) skills and processes	Uses some (2-3) skills and processes	Uses little (1-2) skills and processes	Uses no skill and processes	x1	
Sophistication	Intricate, technical and more difficult to build (appropriate for age)	Mostly intricate, technical and difficult to build (Mostly appropriate for age)	Somewhat intricate, technical and somewhat difficult to build (Somewhat appropriate for age)	Slightly intricate, technical and not very difficult to build (Slightly appropriate for age)	Simple, not technical and not difficult to build (Not appropriate for age)	xl	
Notes:							
						Total:	/10

	Workmanship										
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total				
Square	>90% of the project is level/square	89-80% of the project is level/square	79-70% of the project is level/square	69-60% of the project is level/square	<59% of the project is level/square	x2					
Material Preparation	All faces and edges have been planed, joined and sanded if needed. All parts are a consistent thickness.	Most faces and edges have been planed, joined and sanded if needed. Most parts are a consistent thickness.	Some faces and edges have been planed, joined and sanded if needed. Some parts are a consistent thickness.	Few faces and edges have been planed, joined and sanded if needed. All parts are a consistent thickness.	No faces and edges have been planed, joined and sanded if needed. No parts are a consistent thickness.	x2					
Fabrication	Good joints and fit-up. No sharp edges, poor fit up, and/or rough torch cuts	Most joints and fit-up are good. Few sharp edges, poor fit up, and/or rough torch cuts	Some joints and fit-ups are good. Some sharp edges, poor fit up, and/or rough torch cuts	Few joints and fit-ups are aligned. Many sharp edges, poor fit up, and/or rough torch cuts	Joints and fit-up are not aligned. Sharp edges, poor fit up, and/or rough torch cuts	x2					
Gluing	All joints are glued properly and sufficiently. There are no visible glue marks.	Most joints are glued properly and sufficiently. There are few visible glue marks.	Some joints are glued properly and sufficiently. There are some visible glue marks.	Few joints are glued properly and sufficiently. There are many visible glue marks.	No joints are glued properly and sufficiently. There are many visible glue marks.	x1					
Sanding	Everything was sanded perfectly.	Most of the project was sanded well.	Some of the project was sanded well.	Few parts of the project are sanded well.	Needs to be sanded.	x1					
Weld Quality	Uniform bead profile,	Mostly uniform bead profile and	Some uniform beads, and	Few uniform beads, and	No uniform beads, and						

Calaveras County Fair Metal/Wood Shop Rubric

	feathering good penetration - No signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	penetration of weld - Few signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	penetration of weld - Some signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	penetration of weld - Many signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	penetration of weld - Signs of cold welds, over welding, lack of penetration, undercutting, overlap, distortion control, poor bead profile, pin holes	x3	
Grinding	No signs of excessive grinding or lack of proper grinding	Few signs of excessive grinding or lack of proper grinding	Some signs of excessive grinding or lack of proper grinding	Many signs of excessive grinding or lack of proper grinding	Excessive grinding or lack of proper grinding	x1	
Paint Prep & Finish	Slag and buckshot removed, no body filler. Uniform paint coating with no runs. Stain is applied evenly with no splotches.	Slag and buckshot mostly removed, no body filler. Uniform paint coating with few runs. Stain is applied mostly evenly with few splotches.	Slag and buckshot some removed, some body filler. Uniform paint coating with some runs. Stain is applied somewhat evenly with some splotches.	Slag and buckshot needs to be removed, use of body filler. Paint coating is not uniform, many runs. Stain is not applied evenly with many splotches.	Slag and buckshot not removed, use of body filler. Paint coating is not uniform, and has a lot of runs. Stain is not applied evenly, causing discoloration.	x1	
						Total:	/65
			CNC and P	rogramming			
Machining	No signs of inconsistent countersink or	Few signs of inconsistent countersink or	Some signs of inconsistent countersink or	Many signs of inconsistent countersink or	Many signs of inconsistent countersink or		

	counterbore. No signs of machining defects (planer stripes and snipes, tears around corners, etc)	counterbore. Few signs of machining defects (planer stripes and snipes, tears around corners, etc)	counterbore. Some signs of machining defects (planer stripes and snipes, tears around corners, etc)	counterbore. Many signs of machining defects (planer stripes and snipes, tears around corners, etc)	counterbore. Many signs of machining defects (planer stripes and snipes, tears around corners, etc), to the point it is distracting	X1	
Notes:						Total:	/5
			Design and	d Materials			
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Materials	Materials correctly sized for the project (not over or undersized for the load)	Materials mostly the correct size for the project (not over or undersized for the load)	Some materials not correctly sized for the project (over or undersized for the load)	Many materials not correctly sized for the project (over or undersized for the load)	Materials not correctly sized for the project (over or undersized for the load)	x2	
Fasteners	Screws and bolts coating compatible with the project. Used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating compatible with most of the project. Mostly used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating are somewhat compatible with the project. Some used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating slightly compatible with the project. Few used correctly (right size for the project, not excessively protruding from the project).	Screws and bolts coating are not compatible with the project. Not used correctly (wrong size for the project, excessively protruding from the project).	x2	
Creativity/Desig n	Project design supports the	Project design mostly supports	Project design somewhat	Project design slightly supports	Project design does not supports		

	intended purpose of the project. Project is original, attention to detail, contains original ideas, artistic	the intended purpose of the project. Project is mostly original, attention to detail, contains original ideas, artistic	supports the intended purpose of the project. Project is somewhat original, attention to detail, contains original ideas, artistic	the intended purpose of the project. Project is slightly original, attention to detail, contains original ideas, artistic	the intended purpose of the project. Project is slightly original, attention to detail, contains original ideas, artistic	x2	
Practicability	Project is practical and materials are functional (materials are cost effective for the project)	Project is mostly practical and materials are functional (materials are mostly cost effective for the project)	Project is somewhat practical and materials are functional (materials are somewhat cost effective for the project)	Project is slightly practical and materials are functional (materials are slightly cost effective for the project)	Project is not practical and materials are not functional (materials are not cost effective for the project)	x2	
Notes:						Total:	/40
			Diffi	culty			
	Mastery (5)	Proficient (4)	Approaching (3)	Novice (2)	Needs Improvement (1)	Multipliers	Total
Size, Scope, Complexity	Uses multiple (5+) skills and processes	Uses many (3-4) skills and processes	Uses some (2-3) skills and processes	Uses little (1-2) skills and processes	Uses no skill and processes	xl	

		appropriate for age)			
Notes:					
				Total:	/10