

	Excellent	Above Average	Satisfactory	Needs Improvement	Unsatisfactory	Self Assessment	Teacher Assessment
Workmanship Level of expertise exhibited using tools and machines necessary to complete the project	5 Points Car precisely matches drawing: Clean straight cuts, smooth clean arcs, no random cuts or extra holes	4 Points Car very closely resembles drawing: Lines are mostly clean, no random cuts or extra holes	3 Points Car resembles drawing: Lines are fairly clean; possibly a minor random cut or two; re-drilled an axle hole	2 Points Car has changes made that are not present on the drawing; rough lines or arcs; many random cuts or deep cuts; re-drilled both axle holes	1 Points Car does not match drawing; car snapped in two or more pieces; very rough lines and arcs; many random cuts	/5	/5
Sanding Use of abrasive tools and materials to remove defects and smooth the surface of the car	5 Points All imperfections have been removed, clean smooth (as glass) edges and faces (including painted surfaces)	4 Points 1 – 2 minor imperfections (including minor rough patches in paint)	3 Points 3 – 5 minor imperfections; painted surface has not been sanded; spots on body were not sanded before painting	2 Points 6+ minor imperfections; rough patches on the body (including those from rough sand paper); edges have not been smoothed over	1 Points Little to no sanding is evident	/5	/5
Finish Use of paint or other finish to create a visually appealing final product	5 Points High visual appeal	4 Points Above average visual appeal	3 Points Moderate visual appeal	2 Points Below average visual appeal	1 Points Poor visual appeal	/5	/5
Design Effort Visible effort of creating a high quality design	5 Points Well thought out design, evidence of significant time and effort in research and creating design on WhiteBox (under benchmark of 1.10 sec or 25+ in-spec iterations)	4 Points Well thought out design, moderate evidence of time and effort in research and creating design on WhiteBox (not under benchmark and 20-24 in-spec iterations)	3 Points Well thought out design, sufficient evidence of time and effort in research and creating design on WhiteBox (not under benchmark and 15-19 in-spec iterations or 25+ without research completed)	2 Points Minimal changes made to blank or similar to default; minimal effort in research and creating design	1 Points Blank was left whole or matches default	/5	/5
Aerodynamics Ability of air to flow smoothly around the design	5 Points All surfaces are extremely smooth, all edges have been rounded well(R 1/2"), there are no blunt areas or spots for eddy currents to form	4 Points All surfaces are fairly smooth, edges have been rounded fairly well (R 3/8"), there are little to no blunt areas or spots for eddy currents to form	3 Points All surfaces are reasonably smooth, edges have been somewhat rounded (R 1/4"); has minor blunt areas or spots for eddy currents to form	2 Points Surfaces are not smooth; edges have barely been rounded (R 1/8"); has blunt areas that catch wind, has areas where eddy currents will form	1 Points Front end was left flat; rough edges; edges have not been rounded; has excessive amount of spaces for eddy currents to form	/5	/5
Use of Time Using time in class wisely to obtain the best results. Time on task.	5 Points On task throughout entire project	4 Points Only off task and had to be redirected or forgot shoes 1 time	3 Points Off task and had to be redirected or forgot shoes 2-3 times	2 Points Off task and had to be redirected or forgot shoes 4-5 times	1 Points Off task and had to be redirected or forgot shoes 6+ times	/5	/5
Completion Car has all required elements (shape, axle holes, axles, wheels, screw eyes, finish, etc.)	20 Points Car is complete				0 Points Car is not complete	/20	/20
TOTAL						/50	/50

