	Technological	Design
A Challenged I	Process of Ideas to a Worki	ng Solution

Name:	
Date:	

SAMPLE ROBOT WELDMENT FRAME CHECK LIST

This is a check list for ensuring you follow the right steps and check that you have completed all of the tasks. Check it off, if it is done You can use the descriptions to ensure all details and steps have been completed before checking off and handing in to ensure great mark!

Peer Marker Name:

#	Task	Description	Self	Peer	Teacher	Weight
1	2 Weldment Profiles	3 Custom folders created with working/named Library Feature Parts 4.0x3.0x0.125-AL-RHS-6061T6.SLDLFP and 3.0x1.0x0.125-AL-RHS-6061T6.SLDLFP fully defined with description filled in, material type defined, extra reference lines and points, and SW custom file location for Weldment Profiles saved.				10
2	Weldment Frame	Properly named d-joe_frame-base_P_RHS-AL-35x27.SLDPRT part file inside a tdj_j-joe_frc-robot-2015 top-level project folder and fully defined 2D sketch 35" * 27" centre rectangle coincident with origin on top view, open end to the right using a construction line and a cross support sketch line 14" from back (left) side of robot using the 4*3 for the sides and 3*1 for the cross supports.				15
3	Weldment Trim & Caps	3*1 Cross supports trimmed to inside face of both 4*3 side frames and also inside ¼" caps put on ends of 4*3 frame pieces with 2" round holes leaving frame length still 35"				10
4	Drive Wheel/Gear Bearing Support Holes	2D sketches fully defined for bearing holes, 1 gear sprocket axel, and 2 wheel axels through all (for a total of 6) and 2 gear box support/mounting holes fully defined and mirrored for both inside 4*3 side frames.				10
5	Bottom Cut-outs	Fully defined 2D sketch laid out with construction lines, bottom wheel openings, sprocket, and triangle cut-outs evenly spaced with fillets mirrored to other side, cut-out.				15
6	8 Weld Beads	1/16" Fillet and butt welds joining cross pieces (4) and caps (8).				10
7	Features in Tree Re-Named	All features re-named appropriately for organization and clarity as to what part they are on your robot frame, have cut list updated.				10
8	Frame Drawing	Properly scaled and spaced ortho views, dimensions – overall and details, half cross-section view, detail of gearbox mount from section view, detail from ISO for end cap and gear box mount, weld table, cut list table, balloon id, info block filled in, saved with proper file name format inside your top-level project folder.				20
		Mass pounds, Volume cubic inches, Surface area square inches				100