

Circuit Project

Electronics – Mr. Hall

GRADING RUBRIC

	Additional work needed	Somewhat satisfactory	Good quality	Excellent - professional work	Score
Title, purpose, and source (10 pts.)	(5 pts.) <i>Purpose and source are vague.</i>	(7.5 pts.) <i>Purpose or source somewhat vague.</i>	(10 pts.) <i>Purpose and source are clear.</i>		
Schematic (10 pts.)	(5 pts.) <i>Lines are crooked, components are missing or incorrect. Connections ambiguous.</i>	(7.5 pts.) <i>Lines are mostly straight. Most components correct. Connections clear.</i>	(10 pts.) <i>Lines straight. Components and connections all correct.</i>	(12.5 pts.) <i>Schematic is computer or calligraphic quality.</i>	
Circuit complexity (10 pts.)	(5 pts.) <i><7 components 0-1 chip/transistor</i>	(7.5 pts.) <i>7-12 components 0-1 chip/transistor</i>	(10 pts.) <i>>12 components >1 chip/transistor</i>	(12.5 pts.) <i>>20 components >3 chip/transistor</i>	
Originality (5 pts.)	(1 pt.) <i>Circuit is from kit.</i>	(3 pts.) <i>Circuit is from book or web site with no mods.</i>	(5 pts.) <i>Circuit from book or web with one or more mods.</i>	(7.5 pts.) <i>Original circuit or from book or web with many mods.</i>	
Overall aesthetic (5 pts.)	(1 pt.) <i>Design needs to be refined: circuit or packaging made more appealing.</i>	(3 pts.) <i>Solid but basic project.</i>	(5 pts.) <i>Project appeals to or impresses other students.</i>	(7.5 pts.) <i>Excellent appeal. Everyone wants one.</i>	
Workmanship (box) (10 pts.)	(5 pts.) <i>Loose components in or on box. Box marked up due to assembly.</i>	(7.5 pts.) <i>Most components tight. Very few marks on box.</i>	(10 pts.) <i>Components all tight. Little to no marking on box.</i>	(12.5 pts.) <i>Professional package. Looks store bought or unique package.</i>	
Workmanship (circuit) (20 pts.)	(10 pts.) <i>Cold solder joints or excessive solder, leads unclipped, board/components burned or discolored.</i>	(15 pts.) <i>Leads clipped, most solder joints good, relatively few burn marks.</i>	(20 pts.) <i>Solder joints clean, leads clipped, board and components clean.</i>	(22.5 pts.) <i>Board looks computer assembled. Solder joints even. No marks on board.</i>	
Function (20 pts.)	(10 pts.) <i>Project doesn't work.</i>	(15 pts.) <i>Project works partially or intermittently.</i>	(20 pts.) <i>Project works as designed.</i>		
Completion (10 pts.)	(3 pts.) <i>Project only partially completed or complete but still on breadboard.</i>	(5 pts.) <i>Project mostly completed. Incomplete packaging.</i>	(10 pts.) <i>Project complete and handed in by the due date.</i>	(12.5 pts.) <i>Project complete and turned in a week ahead of time.</i>	