Names: _____   _____

_____   _____

Grade	

Independent Research Project:
Workday 1

Part 1: Observing with the Professor Robert L. Mutel Telescope

1. Using the MACRO Observation Planning Tool, fill in the chart below to determine some objects observable by the MACRO Professor Robert L. Mutel Telescope tonight. Some targets may not be observable at all; note this if so.

Object Name	Other Name	Object Type (star cluster, planet, galaxy, nebula, etc.)	Times Observable		Best Time to Observe (if Observable)
Messier 13					
Messier 16					
Messier 27					
Messier 31					
Messier 33					
Messier 42					
Messier 51					
NGC 869					
NGC 6888					
NGC 6992					
NGC 7635					

Part 2: Object Selection and Observation Plan

1.) Review the Final Observing Project Description document. What Object Type has your group picked to study (nebula, galaxy, etc.)? List three facts about this type of object below. What is the name of your observation target (what Object Option will your group attempt to observe using the RLMT)? Also select and list a Backup Option below.

2.) Why does the RLMT have filters?

3.) Fill in the table below and prepare an observing request on the RLMT by going to the MACRO Website linked on the lab webpage and clicking 'Make an Observation Request...'. What filters and exposure times did you choose and input for your target? Submit your observing request and show the online notification page of your successful submission to your TA, having them stamp below.

Object Choice	Filters	Exposure Times (s)	TA Stamp

4.) Tour the Van Allen Observatory and learn how it is similar to and different from the RLMT. Take notes below.