

Names:

Grade	
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Project Workday I

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

1. Using the Airmass.org website, fill in the chart below to determine when objects are 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, nebula, galaxy, etc.)	Time Observable (MST)	Best Time to Observe (if Observable)
Messier 1				
Messier 13				
Messier 16				
Messier 27				
Messier 31				
Messier 42				
Messier 51				
Messier 81				
Messier 82				
NGC 6888				
NGC 6992				

Part 2: Object Selection and Observation Plan

1.) Review the Final Observing Project Description document. What object type has your group picked to study (star cluster, nebula, or galaxy), and why? List three facts about this type of astronomical object below.

2.) Now that you have picked which type of object to study, go back to the chart on the previous page and select one target to observe. What is the name of your target?

3.) Using the internet, research some general information about your observation target, and write a short paragraph about its characteristics. You may want to include information about your target's age, distance, apparent magnitude, and any fun facts you find.

4.) Based on what you just learned about your observation target, which 3 filters would be best for observing it, and why?

5.) Using the object and filters you selected, fill out the table below. You can find appropriate exposure times for each filter on Part 2 of the lab webpage.

Object Choice	Filters	Exposure Time

Important note: Before leaving lab, your group **must** submit your observation request via the Microsoft Form, linked on the Part 2 webpage for this lab. If you do not do this, you will **NOT** receive project images.