

Names of members of lab group (alphabetical please)			
Coordinator(s):		Acknowledged Members:	

Take care in how you decide to complete this exercise. Do not wait to the last day possible to complete this exercise (it might be cloudy or raining). In viewing the sky charts, choose an optimum day for viewing, and have backup days in case you cannot view on the day you have chosen.

Step 1. Use the Sky Map link in the PHY250 website to access the Your Sky software. Set the sky map for views from Dayton, Ohio. Print a copy of the sky AS YOU EXPECT TO SEE IT based upon class discussions and time and date information. Please list in the tables below the settings that you used to print your sky chart. Use as a reference the Powerpoints in the PHY250 website on Stellar Magnitudes and Using the *Your Sky* Software. You can also use the sky charts in the back of the book as well. Attach your printout of the sky chart to this report.

Note: since your ability to observe the sky will be based upon the clarity of the night, your printout of the sky chart might not match the EXACT time and date you go out. Since the sky doesn't changer that much from day to day, what you print out should be close enough.

[Now](#)

Date and Time [Universal time:](#)

[Julian day:](#)

Latitude: North South

Observing Site Longitude: East West

[Set for nearby city](#)

Display Options

- [Ecliptic and equator](#)
- [Moon and planets](#)
- [Deep sky objects of magnitude](#) [and brighter](#)

Constellations:

- [Outlines](#)
- [Names](#) [aligned with horizon?](#)
- [Boundaries](#)

Stars:

Show stars brighter than magnitude

[Names for magnitude](#) [and brighter](#)

[Bayer/Flamsteed codes](#) for mag. [and brighter](#)

[Invert North and South](#)

Image size: pixels

Colour scheme:

Why did you choose the setting highlighted in red under display options (above)? Be precise and brief.

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The Night Sky
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Group Number:

Step 2. Go out with your group on a clear night and observe the night sky. Take your sky charts (in the back of the book or your printout).

Which stars can you identify in the sky from the sky charts? Fill in as many stars as you can (the chart does not need to be filled).

While you are out making your observations, look carefully at the night sky. Locate the dimmest star you can see and locate the brightest. Following the lead of Hipparchus, associate the brightest star with a magnitude of 1 and the dimmest with a magnitude of 6. Enter your best estimate of the magnitude of each star you identified below.

<i>Star Name</i>	<i>Your choice of magnitude</i>

2. Compare and contrast your printout of the night sky (ie, what you expected) with how the night sky actually looked when you went out. Is your printout identical to what you saw? Why or why not?