

Lesson 165: Lab Report: Milky Way

Earth Science with Lab

Galaxies and Galaxy Classification

A. What is a galaxy?

B. What is meant by "Local Group"?

C. Identify the following galaxies as elliptical, spiral, barred spiral, or irregular.



a. _____



b. _____

Lesson 165: Lab Report: Milky Way (cont.)

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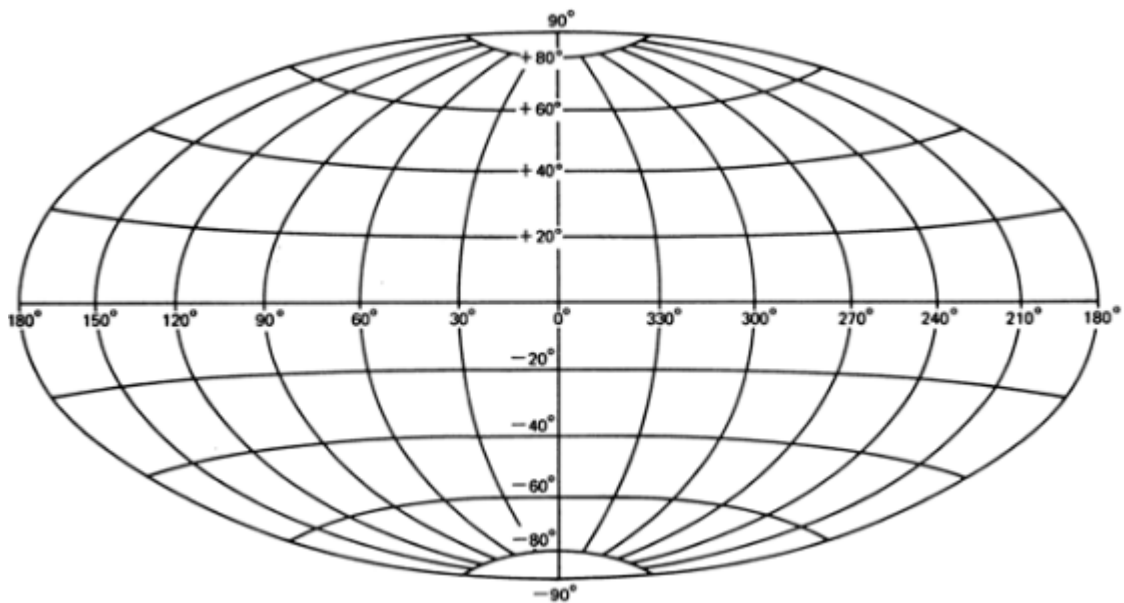


c. _____

d. _____

Galactic Coordinates

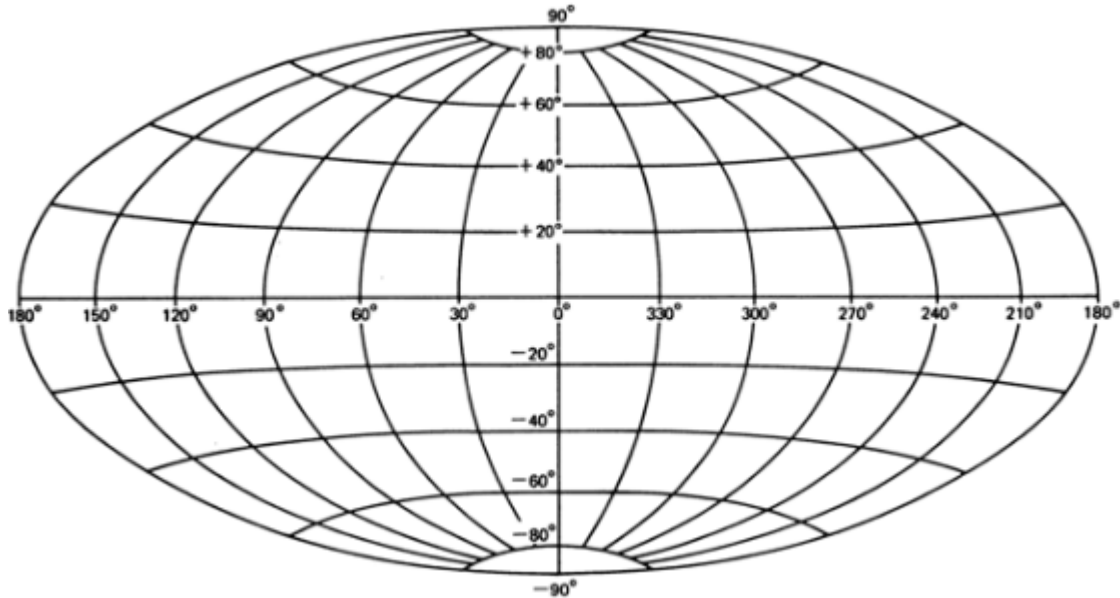
B. "O" stars in the Milky Way – follow directions in section 2.2B (Reminder: latitude is vertical; longitude is horizontal.)



Lesson 165: Lab Report: Milky Way (cont.)

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- C. Long-period variable stars (mostly cool giant stars) in the Milky Way – follow directions in section 2.2C



General Questions on the Milky Way

- B. What are spiral tracers?
- D. What difference is there between a lenticular galaxy and a spiral galaxy?
- E. Which elliptical galaxy would have the most elongated shape, an "E2" galaxy or an "E6" galaxy?

BONUS just for fun: Find the luminosity of a star whose apparent brightness is $1.03 \times 10^{-8} \text{ watt/m}^2$, and whose distance is about 3×10^{18} meters.