

Astronomy Telescope Test Review

1. Can you explain what a light year is and how it is used as a unit?
2. What is a constellation?
3. Can you read a star chart – find constellations, find the horizon, find the zenith?
4. Can you identify the following constellations and stars on a star chart set for the late fall?
 - a. Ursa Major, Ursa Minor, Cassiopeia, Lyra, Cygnus, Aquila, Summer Triangle
 - b. Vega, Deneb, Altair, Polaris
5. Can you explain the difference between the objective lens or mirror and the eyepiece in a telescope?
6. Can you explain the difference in the following term?
 - a. Focal length and aperture
 - b. Focal ratio and magnification
7. Can you explain how a ccd camera takes a telescope picture and how that picture is unique (pixels)?
8. Could you trace light rays as they move through the following telescopes?
 - a. Reflecting
 - b. Refracting
 - c. Catadioptric
9. What is the difference between a Galilean telescope and a Newtonian telescope?
10. Can you explain resolution? Focus? Chromatic aberration?
11. Can you calculate magnification if given a telescope's and eye piece's focal lengths? Would be able to pick adequate eye pieces to use with a particular telescope?
12. What is MEM? Maximum effective magnification & the 20x rule?
13. Can you explain what an image processing program does with telescope images?
14. Can you compare and contrast your eye & telescope in the following ways? Optical system (opening, focusing, sensor); Aperture opening; Exposure time; Resolution; Field of view; Color vs Black & White
15. Can you describe & explain a Large Telescope in detail?

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