

## Astronomy Telescope Test Review

1. Can you explain what a light year is and how it is used as a unit?
2. Can you explain the difference between the objective lens or mirror and the eyepiece in a telescope?
3. Can you explain the difference in the following term?
  - a. Focal length and aperture
  - b. Focal ratio and magnification
4. Can you explain how a ccd camera takes a telescope picture and how that picture is unique (pixels)?
5. Could you trace light rays as they move through the following telescopes?
  - a. Reflecting
  - b. Refracting
  - c. Catadioptric
6. What is the difference between a Galilean telescope and a Newtonian telescope?
7. Can you explain resolution? Focus? Chromatic aberration?
8. Can you calculate magnification if given a telescope's and eye piece's focal lengths? Would you be able to pick adequate eyepieces to use with a particular telescope?
9. What is MEM? Maximum effective magnification & the 20x rule?
10. Can you explain what an image-processing program does with telescope images and why it might be helpful? Can you use such a program (ImageJ)?
11. 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

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