

ASTRONOMY 1001.2 STARS AND GALAXIES

Mid-Term Test.

Name _____

Answer all questions on the test pages, using backs of pages for overflow.

1. Multiple choice questions. Circle the correct, or "most correct" answer.

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| <p>a. The difference between a scientific concept and a pseudoscientific concept is that the pseudoscientific concept</p> <ul style="list-style-type: none">i. appears unbelievableii. is non-mathematical in its descriptioniii. is non-falsifiableiv. is without any observational basisv. originated from outside the scientific community | <p>b. The difference between the first magnitude red star Betelgeuse in Orion and the first magnitude blue star Rigel in Orion is that</p> <ul style="list-style-type: none">i. Rigel is hotter than Betelgeuseii. Betelgeuse is more luminous than Rigeliii. Betelgeuse is brighter than Rigeliv. Rigel is more massive than Betelgeusev. Rigel is larger than Betelgeuse |
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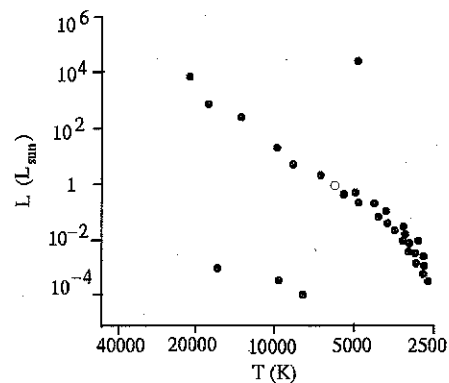
2. Short answer questions. Fill in the blanks:

- a. In essence, the primary purpose of a telescope used for astronomical observations is to

- b. Spectroscopic observations of a star indicate that its motion in the line of sight is changing in periodic fashion, such that it is alternately moving away from the Sun and then towards it. That is because the star is

3. Identify in the H-R diagram at right:

- i. a giant star
- ii. a white dwarf star



Solutions:

- 1. a. iii., b. i.
- 2. a. collect and focus light., b. a binary star and is orbiting an unseen companion.
- 3. i. the star at upper right., ii. Any of the stars at lower left.