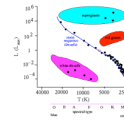


Stars, Galaxies, Universe Test

Study Guide



Read Chapter 15 (Stars, Galaxies, and the Universe) – All Sections – Pages 590 through 631

Astronomy Unit 4 Review: Page 632 – Chapters 12, 14, 15 Big Ideas and Key Concepts

Study textbook homework questions:

- Chapter 15, Section 2 Assessment – Page 605
- Chapter 15, Section 3 Assessment – Page 613
- Chapter 15, Section 4 Assessment – Page 621
- Review and Assessment – Page 629 (1 – 10)
- Applying Skills – Page 630 (23-26)
- Standards Practice – Page 631 (1 – 8)

Know the following key terms:

- | | | |
|---------------------|---------------------------|---------------|
| Absolute brightness | Convex lens | Main sequence |
| Andromeda | Dark matter | Nebula |
| Astronomical Unit | Electromagnetic radiation | Observatory |
| Apparent brightness | Elliptical galaxy | Parallax |
| Big Bang | Galaxy | Spiral galaxy |
| Binary star | Irregular galaxy | Supernova |
| Ceres | Light Year | Telescope |
| Constellation | | |

Know the differences in the following and where they are placed in the life cycle of stars:

- | | | |
|----------------|-------------|---------------|
| • Black hole | • Protostar | • Supernova |
| • Nebula | • Pulsar | • White dwarf |
| • Neutron star | • Red giant | |

- Know the life cycle of a star
- Be able to identify the stages in the life of a star with the mass similar to our sun
- Be able to identify the stages in the life of a star with the mass similar to a super-giant star
- Be able to identify the many kinds of electromagnetic radiation (visible light, ultraviolet light, infrared (heat), x-rays, radio waves, etc)
- Know the location and importance of the Kuiper Belt and the Oort Cloud
- Know that the H-R diagram is based on absolute brightness and temperature
- Be able to interpret the H-R diagram (refer to worksheets on the H-R diagram)
- Know the three basic types of galaxies: spiral, elliptical, and irregular
- Know that our galaxy is a spiral galaxy and is called The Milky Way
- Be able to recognize the following by description or pictures:

| | | | |
|--------------|------------|------------------|------------------|
| asteroid | black hole | comet | deep space field |
| meteor | nebula | planetary nebula | spiral galaxy |
| solar system | | | |