

# Stars and Galaxies

## Section 1 Observing the Universe

A. \_\_\_\_\_ are patterns of stars that look like objects or animals.

1. Constellations have names such as \_\_\_\_\_ and \_\_\_\_\_.
2. Stars have names such as \_\_\_\_\_ and \_\_\_\_\_ (North Star).
3. The \_\_\_\_\_ consists of the seven main stars in the constellation of Ursa Major (Big Bear).

B. Devices for observing stars and other objects that can't be seen with the unaided eye are \_\_\_\_\_.

1. \_\_\_\_\_ collect visible light and have two major parts: an objective and an eyepiece.
2. A \_\_\_\_\_ uses two double convex lenses.
3. A \_\_\_\_\_ uses a concave mirror for the objective and a convex lens for the eyepiece.
4. A \_\_\_\_\_ eliminates the distorting and absorbing effects of Earth's atmosphere.
5. The \_\_\_\_\_ consists of four large mirror reflectors and is located in Chile.
6. A \_\_\_\_\_ use radio waves instead of visible light.
7. A \_\_\_\_\_ uses a prism or diffraction grating to disperse light into its component wavelengths.

## Section 2 Evolution of Stars

A. Stars are formed from \_\_\_\_\_.

1. Stars form because the \_\_\_\_\_ of the gas, ice, and dust in nebula causes the nebula to contract.
2. The temperature rises until it reaches the point when \_\_\_\_\_ occurs. This process releases of enormous amounts of energy and stops the contraction.
3. The \_\_\_\_\_ is a graph showing the temperature and absolute magnitude of a star.
4. Most stars are located near a line called the \_\_\_\_\_.

B. Stars change because stellar \_\_\_\_\_ changes.

1. When the hydrogen fuel is depleted, stars leave the \_\_\_\_\_.