

## Skills Worksheet

**Concept Review**

In the space provided, write the letter of the definition that best matches the term or phrase.

- |                                   |   |
|-----------------------------------|---|
| _____ 1. refracting telescope     | a. a large collection of stars, dust, and gas held together by gravity                    |
| _____ 2. rotation                 | b. the scientific study of the universe   |
| _____ 3. X rays                   | c. the spin of a body on its axis   |
| _____ 4. solstice                 | d. an instrument that uses a curved mirror to gather and focus light from distant objects |
| _____ 5. astronomy                | e. the moment when the sun appears to cross the celestial equator                         |
| _____ 6. reflecting telescope     | f. one complete trip of a body along an orbit   |
| _____ 7. electromagnetic spectrum | g. all the wavelengths of electromagnetic radiation                                       |
| _____ 8. equinox                  | h. an instrument that uses a set of lenses to gather and focus light from distant objects |
| _____ 9. galaxy                   | i. the point at which the sun is as far north or as far south of the equator as possible  |
| _____ 10. revolution              | j. some invisible wavelengths of the electromagnetic spectrum                             |

In the space provided, write the letter of the answer choice that best completes each statement or best answers each question.

- \_\_\_\_\_ 11. Which of the following statements is correct?
- Astronomers use only visible electromagnetic radiation to study space.
  - Only invisible electromagnetic radiation is useful in space study.
  - Both visible and invisible electromagnetic radiation are analyzed to study space.
  - Neither visible nor invisible electromagnetic radiation is useful for space study.
- \_\_\_\_\_ 12. Which provides evidence of Earth's rotation?
- the shifting of constellations in the sky over several weeks
  - the period between successive full moons
  - the change of seasons
  - Foucault's pendulum

**Concept Review continued**

- \_\_\_\_\_ 13. The average distance between Earth and the sun is known as a(n)  
a. light-year.  
b. astronomical unit.  
c. big bang.  
d. aphelion.
- \_\_\_\_\_ 14. Leap years were established because  
a. a complete rotation of Earth takes more than 24 hours.  
b. a year is 365 days and one revolution takes  $365\frac{1}{4}$  days.  
c. a month is 30 or 31 days and a lunar month is only 29.5 days.  
d. the Romans wanted to create a day to honor Julius Caesar.
- \_\_\_\_\_ 15. In the Northern Hemisphere, the vernal equinox occurs on  
a. March 21 or 22.  
b. June 21 or 22.  
c. September 22 or 23.  
d. December 21 or 22.
- \_\_\_\_\_ 16. Which is evidence that Earth revolves around the sun?  
a. The path of a pendulum appears to change over time.  
b. Wind belts and ocean currents curve.  
c. We can feel Earth moving.  
d. Constellations appear to change position over several weeks.
- \_\_\_\_\_ 17. NASA's research on the flow of fluids through rockets led to  
a. improved medical equipment.  
b. automobile navigation systems.  
c. smaller and lighter televisions.  
d. powerful radio telescopes.
- \_\_\_\_\_ 18. Because of Earth's atmosphere, telescopes for invisible electromagnetic radiation  
a. work best on Earth's surface.  
b. do not work at high elevations.  
c. have been launched into space.  
d. are not effective in studying space.
- \_\_\_\_\_ 19. Into how many time zones has Earth's surface has been divided?  
a. 10  
b. 15  
c. 24  
d. 360
- \_\_\_\_\_ 20. Daylight time is shorter in the winter than in the summer because of  
a. Earth's elliptical orbit.  
b. Earth's simultaneous rotation and revolution.  
c. Earth's spherical shape.  
d. the tilt of Earth's axis.