

Assessment

Chapter Test A**Chapter: Studying Space****MATCHING**

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

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|--------------------------------|--|
| _____ 1. ultraviolet radiation | a. a group of stars organized in a recognizable pattern |
| _____ 2. galaxy | b. the motion of a body around another body in space |
| _____ 3. rotation | c. the point in time when the sun appears to cross the celestial equator |
| _____ 4. solstice | d. part of the electromagnetic spectrum with waves longer than those of visible light |
| _____ 5. calendar | e. the day on which the sun is as far north or as far south of the equator as possible |
| _____ 6. constellation | f. the point in a planet's orbit at which the planet is closest to the sun |
| _____ 7. revolution | g. wavelengths that are shorter than violet light |
| _____ 8. infrared radiation | h. the spin of a body on its axis |
| _____ 9. perihelion | i. a collection of stars, dust, and gas that are held together by gravity |
| _____ 10. equinox | j. a system for measuring intervals of time by dividing it into days, weeks, months, and years |

MULTIPLE CHOICE

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

- _____ 11. A light-year equals
- 150 million km.
 - 9.46×10^{12} km.
 - 14 billion km.
 - 300 million m/s.
- _____ 12. The event that many astronomers believe began the universe was
- the Milky Way galaxy.
 - a black hole.
 - the big bang.
 - the electromagnetic spectrum.

Chapter Test A *continued*

- _____ 13. A constellation's changing position in the sky, at the same time of the evening over a period of several weeks, is evidence that
- Earth is round.
 - Earth's axis is tilted.
 - Earth rotates on its axis.
 - Earth revolves around the sun.
- _____ 14. The telescope that solved the problem of color separation was the
- Hubble space telescope.
 - refracting telescope.
 - Overwhelmingly Large Telescope.
 - reflecting telescope.
- _____ 15. The Coriolis effect provides evidence that
- Earth rotates on its axis.
 - Earth revolves around the sun.
 - the moon revolves around Earth.
 - Earth has an elliptical orbit.
- _____ 16. Which telescope does NOT detect visible light?
- radio telescope
 - optical telescope
 - refracting telescope
 - reflecting telescope
- _____ 17. The period between successive full moons is approximately
- 24 hours.
 - 29.5 days.
 - 31 days.
 - 365 $\frac{1}{4}$ days.
- _____ 18. Invisible electromagnetic radiation was discovered with a
- compass.
 - telescope.
 - thermometer.
 - prism.
- _____ 19. Each of Earth's standard time zones covers about
- | | |
|--------|--------|
| a. 10° | c. 24° |
| b. 15° | d. 36° |
- _____ 20. A benefit that 20th- and 21st-century space programs have brought to an area outside of astronomy is a(n)
- improved heart pump.
 - telescope to detect invisible electromagnetic waves.
 - more accurate calendar.
 - more efficient automobile fuel.

Assessment

Chapter Test B**Chapter: Studying Space****MATCHING**

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

- | | |
|-------------------------------|---|
| _____ 1. refracting telescope | a. unit of measurement that equals approximately 150 million km |
| _____ 2. big bang | b. instrument used by Galileo to see craters on the moon for the first time |
| _____ 3. reflecting telescope | c. event that many astronomers believe started the universe |
| _____ 4. light-year | d. unit that equals 9.46×10^{12} km |
| _____ 5. astronomical unit | e. instrument invented by Isaac Newton to solve the problem of color separation |

MULTIPLE CHOICE

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

- _____ 6. One piece of evidence of Earth's revolution around the sun is
- the Coriolis effect.
 - Foucault's pendulum.
 - the varying positions of a constellation over a period of hours.
 - the varying positions of a constellation over a period of weeks.
- _____ 7. Different colors are the result of
- varying speeds at which different colors of light travel.
 - varying wavelengths of different colors of light.
 - varying temperatures of different colors of light.
 - varying velocities at which different colors of light travel.
- _____ 8. Our current calendar is most like that of the ancient
- Egyptians.
 - Babylonians.
 - Aztecs.
 - Romans.
- _____ 9. When it is Saturday east of the International Date Line, what day is it west of the line?
- Friday
 - Saturday
 - Sunday
 - Monday

Chapter Test B *continued*

- _____ 10. When Earth is 147 million km from the sun, it is at its
- ellipse.
 - perihelion.
 - aphelion.
 - astronomical unit.
- _____ 11. What problem is solved by sending telescopes into space?
- interference of Earth's atmosphere in detecting electromagnetic radiation
 - inability of optical telescopes to detect invisible electromagnetic radiation
 - interference of dry air in detecting electromagnetic radiation
 - interference of gamma rays in detecting electromagnetic radiation
- _____ 12. The Coriolis effect provides evidence that
- Earth has an elliptical orbit.
 - Earth rotates on its axis.
 - Earth's axis is tilted.
 - Earth revolves around the sun every 365 $\frac{1}{4}$ days.
- _____ 13. A type of electromagnetic radiation that has waves that are longer than waves of visible light is
- ultraviolet radiation.
 - X-ray radiation.
 - gamma-ray radiation.
 - infrared radiation.
- _____ 14. A region where daylight savings time is unnecessary is
- the United States.
 - Europe.
 - the equator.
 - the Tropic of Cancer.
- _____ 15. Which is NOT a benefit of space exploration to areas outside astronomy?
- more accurate weather forecasts
 - automobile navigation systems
 - more precise prediction of solstices and equinoxes
 - smaller, lighter televisions