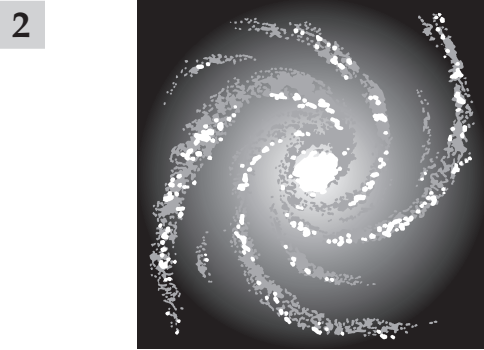


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Standards Practice

- 1** What force holds each galaxy together?
- A gravity
 - B friction from gas and dust
 - C nuclear fusion
 - D dark energy



What type of galaxy is shown in the illustration?

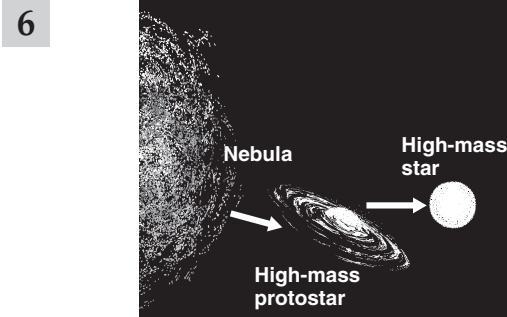
- A elliptical
 - B quasar
 - C spiral
 - D irregular
- 3** In the sun, nuclear fusion involves
- A the splitting of helium atoms.
 - B the combining of hydrogen atoms to form helium.
 - C the radiation of hydrogen atoms through helium atoms.
 - D eruptions of hydrogen atoms on the sun's surface.

- 4** Which layer of the sun's atmosphere extends into space for millions of kilometers?

- A radiation zone
- B chromosphere
- C photosphere
- D corona

- 5** Astronomers discovered a new star, and determined that it has a much greater mass than the sun. By determining the star's mass, they know that

- A the star will have a shorter life than the sun.
- B the star will have a longer life than the sun.
- C the star will end its life as a white dwarf.
- D the star will eventually become a protostar.



The picture shows the first three stages in the life cycle of a high-mass star. What is the next stage?

- A red giant
- B neutron star
- C supergiant
- D white dwarf

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7 Jupiter's average distance from the sun is 5.2 astronomical units (AU). This means that Jupiter is 5.2 times

- A the distance light travels in a year from the sun.
- B Earth's average distance from the sun.
- C the moon's average distance from Earth.
- D farther from the sun than the sun's diameter.

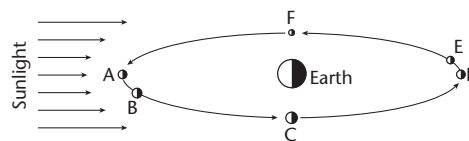
8 A light-year is a unit of

- A mass.
- B time.
- C distance.
- D brightness.

9 On a clear night, a student notices that a star in the constellation Orion is much brighter than the star next to it. What observation has the student made?

- A The first star has a greater apparent brightness than the second star.
- B The first star is producing more light than the second star.
- C The first star has a greater absolute brightness than the second star.
- D The first star is farther along in its life cycle than the second star.

10



What phase of the moon would someone on Earth see when the moon is at position D?

- A new moon
- B first quarter
- C full moon
- D third quarter

11

Which of the planets is closest to the sun?

- A Venus
- B Mars
- C Mercury
- D Earth

12

Which is *not* a characteristic of all of the gas giants?

- A surrounded by rings
- B many moons
- C composed mainly of hydrogen and helium
- D rocky surfaces

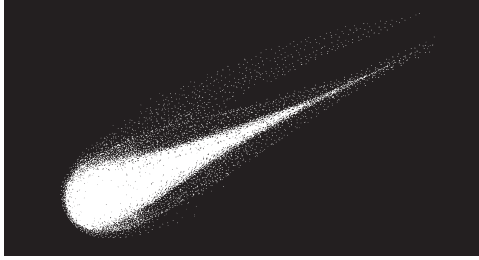
13

Venus is sometimes considered to be similar to Earth. How are they alike?

- A The atmosphere on Venus is about the same as on Earth.
- B Venus is about the same size and density as Earth.
- C Both Venus and Earth are 0.72 AU from the sun.
- D They both take the same amount of time to orbit the sun.

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14



If an astronomer were looking at this comet through a telescope, the astronomer would know that the sun is located

- A the same way the tail is pointing.
- B below the head of the comet.
- C the opposite way the tail is pointing.
- D above the head of the comet

