

**M O D E R N E A R T H S C I E N C E**

## Section 30.2

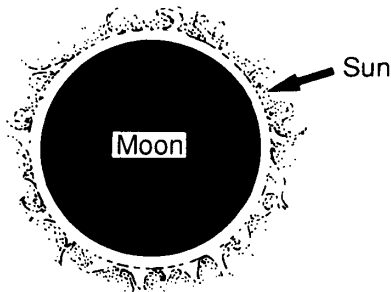
**Movements of the Moon**

Read each statement below. If the statement is true, write *T* in the space provided. If the statement is false, write *F* in the space provided.

- \_\_\_\_\_ 1. The center of mass of the earth-moon system follows a smooth orbit around the sun.
- \_\_\_\_\_ 2. One side of the moon always faces the earth.
- \_\_\_\_\_ 3. The moon passes closest to the earth at apogee.
- \_\_\_\_\_ 4. In the umbra, sunlight is partially blocked.
- \_\_\_\_\_ 5. Lunar eclipses are visible from any location on the dark side of the earth.

Choose the one best response. Write the letter of that choice in the space provided.

- \_\_\_\_\_ 6. The orbit of the moon around the earth forms:
- a. a sphere.                      b. a cone.                      c. a circle.                      d. an ellipse.
- \_\_\_\_\_ 7. What is the difference, in minutes, in the rising time of the moon each day?
- a. 10                                  b. 25                                  c. 50                                  d. 90



- \_\_\_\_\_ 8. What type of eclipse is pictured in the diagram?
- a. total solar eclipse  
b. annular eclipse  
c. penumbral eclipse  
d. lunar eclipse
- \_\_\_\_\_ 9. A total solar eclipse lasts no more than seven minutes at any location on earth because:
- a. seven minutes is the time it takes for the moon to pass through the earth's penumbra.  
b. the earth's rotation causes the area under the shadow of the moon to move rapidly.  
c. seven minutes is the time it takes for the moon to pass through the earth's umbra.  
d. the moon's spin causes its shadow to move quickly over the earth.
- \_\_\_\_\_ 10. The center of mass of the earth-moon system is at a balance point, which is located:
- a. within the earth's interior.  
b. less than halfway between the earth and moon.  
c. within the moon's interior.  
d. more than halfway between the earth and moon.