

1. What term is given to the visible “surface” of the Sun?

- a. corona
  - b. chromosphere
  - c. prominence
  - d. photosphere
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2. The temperature of the Sun's photosphere is

- a. close to 1 million K.
  - b. 4300 K.
  - c. about 10,000 K.
  - d. 5800 K.
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3. What causes limb darkening?

- a. The limb of the Sun is darker than the center because sunspots collect along the limb.
  - b. Convection within the Sun is more efficient laterally than it is vertically with the result that the middle latitude regions of the Sun's surface are hotter than the poles.
  - c. Light reaching us from the limb of the Sun originates in the higher, cooler layers of the Sun.
  - d. The photosphere at the edge of the Sun's surface is cooler than it is in the middle of the Sun's surface.
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4. Which part of the Sun is the least dense?

- a. chromosphere
  - b. core
  - c. corona
  - d. photosphere
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5. What is the rotation period of the Sun?

- a. about four rotations per month
  - b. about one rotation per day
  - c. about one rotation per month
  - d. about two rotations per year
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6. Nuclear fusion is the

- a. combining of electrons with nuclei to produce atoms and release energy.
  - b. combining of hydrogen atoms to produce hydrogen molecules,  $H_2$ , and energy.
  - c. splitting of heavier nuclei to produce lighter nuclei and energy.
  - d. combining of light nuclei (e.g., hydrogen) to produce heavier nuclei (e.g., helium) with a resultant release of energy.
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7. From which fusion reaction does the Sun derive its power?

- a.  $2H \Rightarrow He$
  - b.  $4H \Rightarrow He$
  - c.  $4He \Rightarrow O$
  - d.  $3He \Rightarrow C$
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8. Where is the chromosphere on the Sun?

- a. The chromosphere is the outermost part of the Sun's atmosphere.
  - b. The chromosphere is the layer above the visible surface of the Sun.
  - c. The chromosphere is the visible surface of the Sun.
  - d. The chromosphere is the layer below the visible surface of the Sun, where convection begins.
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