1. Ocean tides are caused primarily by:
   A. seismic pressure waves beneath the surface
   B. the Moon’s gravitational pull
   C. the Sun’s gravitational pull
   D. sunlight reflecting off waves
   E. tectonic motion of the spreading ocean floor.

2. A solar eclipse can only occur when the Moon is
   A. Full
   B. Waxing
   C. Waning
   D. New
   E. Gibbous.

3. What phase would the Earth appear to be in, if you were standing on the Moon at Full Moon?
   A. Waxing gibbous
   B. Crescent
   C. Full
   D. New
   E. Only the Moon can show phases.

4. The first quarter Moon rises:
   A. at sunset
   B. at sunrise
   C. at about noon
   D. at about midnight
   E. during the second week of each calendar month

5. The Copernican model of the Universe was historically important because it
   A. included only elliptical orbits
   B. contained epicycles
   C. made very accurate predictions for the positions of the planets
   D. was a heliocentric model
   E. predicted the phases of Mars
6. All planetary orbits are  
   A. circles with the Sun at the center  
   B. ellipses with the Sun at the center  
   C. ellipses with the Sun at one focus  
   D. ovals with the Sun at the center  
   E. circles with the Sun at one focus  

7. Kepler’s Second Law (the ‘equal areas’ law) expresses the fact that:  
   A. the Sun is at one focus  
   B. distant planets have more area  
   C. planets move faster near the Sun  
   D. bigger planets have more area  
   E. all of the above.  

8. Newton’s First Law expresses the fact that:  
   A. a net force is applied to all existing bodies  
   B. a force applied to a body causes an acceleration  
   C. a body’s inertia changes with its location  
   D. a body maintains its velocity unless a force is applied to it  
   E. a body always remains at rest unless a force is applied to it.  

9. During summer in either hemisphere, the temperature is higher because:  
   A. the Sun stops moving  
   B. the Sun is furthest North  
   C. the Sun raises higher in the sky  
   D. the Earth is closer to the Sun  
   E. the Earth has a higher inclination away from the Sun  

10. The phenomenon that causes the position of the Earth’s celestial poles to move among the stars is called:  
    A. precession  
    B. retrograde motion  
    C. parallax  
    D. regression  
    E. continental drift.
SOLUTIONS:
1. B
2. D
3. D
4. C
5. D
6. C
7. C
8. D
9. C
10. A