



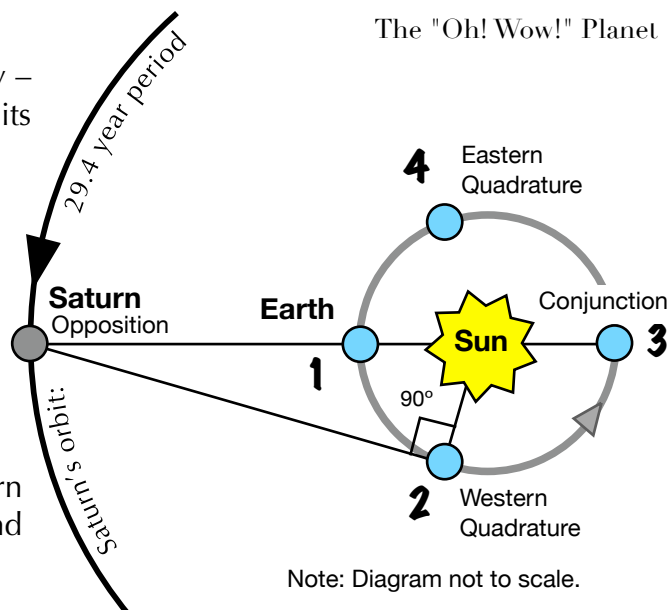
# Saturn, the Ringed Planet



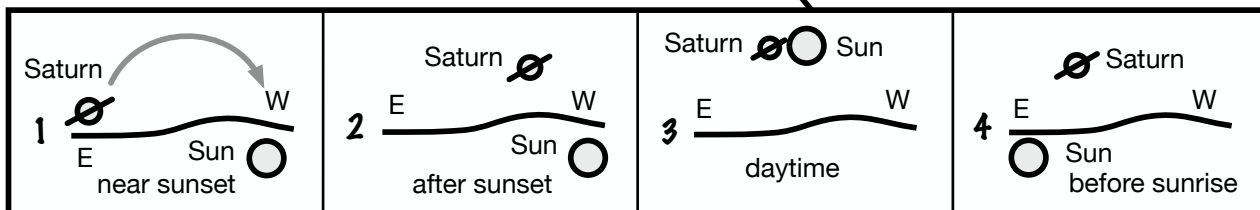
The "Oh! Wow!" Planet

## Orbital Aspects

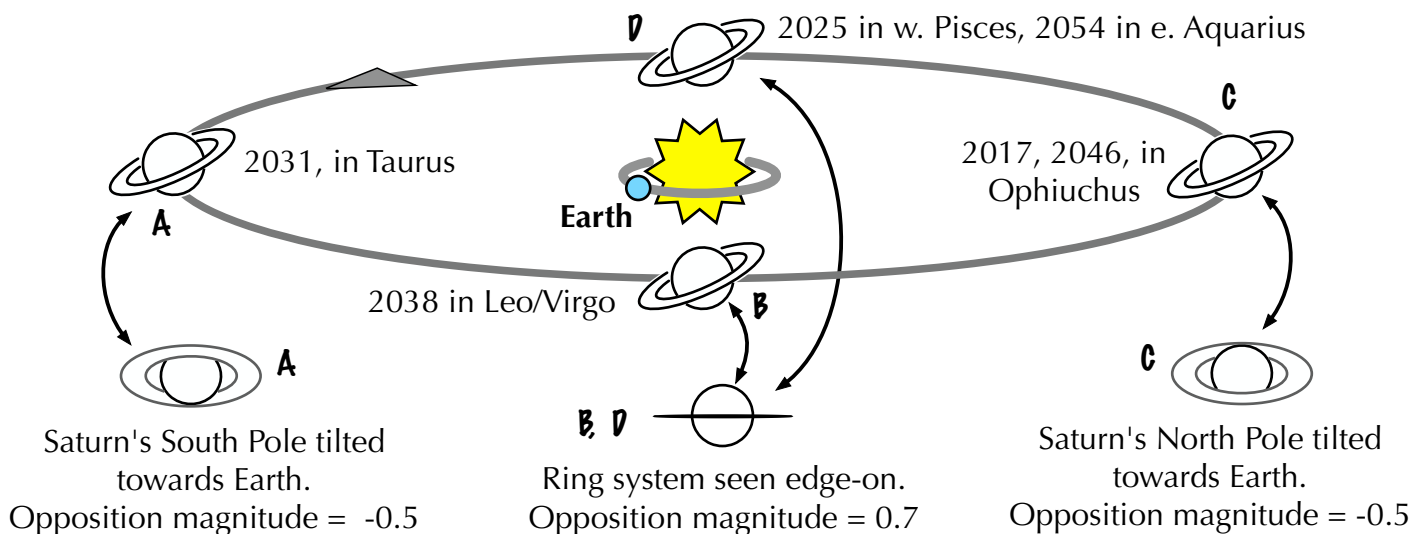
- 1 At opposition – when it is opposite the sun in the sky – Saturn is at its closest to Earth and, hence, at its brightest. It rises near sunset and is visible all night.
- 2 As Earth moves ahead of Saturn, it is seen moving nightly towards the west after sunset. Eventually, it will set just after sunset.
- 3 At solar conjunction – when Saturn lies on the far side of the Sun – it appears in the daytime sky near the Sun, and can't be seen.
- 4 As Earth catches up to Saturn, it is found in the eastern morning sky moving westward away from the Sun, and rising earlier. Eventually, it rises shortly after sunset.



Note: Diagram not to scale.



## Saturn's ring tilt in its 29 year orbit around the sun



## Appearance of Saturn's tilt as viewed from Earth.

### Relative orbital distances from the sun to selected bodies in the solar system

Saturn  
9.5 AU

Jupiter  
5.2 AU

Asteroid Belt  
2.2–3.2 AU

Mars  
 Earth  
 Venus  
 Mercury  
1 AU

Note: 1 AU = the Earth–Sun distance = 93,000,000 miles