

## PROMETHEUS



Courtesy of NASA/Voyager

### DATA ON PROMETHEUS

Discovered by Stewart Collins and others,  
Voyager 1, 1980

**Distance from center of Saturn**  
139,350 km (86,590 mi)

**Orbital Period**  
0.613 days (14.71 hours)

**Orbital Speed**  
16.50 km/sec (10.23 mi/sec)

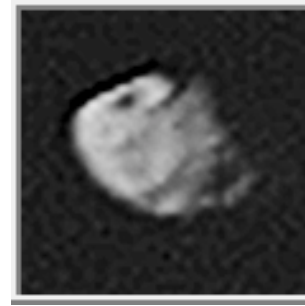
**Radius**  
74 x 50 x 34 km  
average = 53km (33 mi)

**Mass**  
Unknown

**Surface Gravity**  
Unknown

Moving outward from Saturn, Prometheus [pro-MEE-thee-uss] is the third moon. Together with Pandora (the fourth moon) it acts as a shepherd moon for the F Ring. This means the moons' gravity nudges the F Ring particles into a thinner ring, much like shepherds keep their flocks of sheep together. Prometheus is extremely elongated, even more so than an egg. **Cassini might answer...** What could have caused Prometheus' odd shape? How do Prometheus and Pandora shepherd the F Ring? Are there other moons playing shepherding roles?

## PANDORA



Courtesy of NASA/Voyager

### DATA ON PANDORA

Discovered by Stewart Collins and others,  
Voyager 1, 1980

**Distance from center of Saturn**  
141,700 km (88,050 mi)

**Orbital Period**  
0.629 days (15.08 hours)

**Orbital Speed**  
16.37 km/sec (10.15 mi/sec)

**Radius**  
55 x 44 x 31 km  
average = 43 km (27 mi)

**Mass**  
Unknown

**Surface Gravity**  
Unknown

Moving outward from Saturn, Pandora [pan-DOR-uh] is the fourth moon. Together with Prometheus (the third moon) it acts as a shepherd moon for the F Ring. This means the moons' gravity nudges the F Ring particles into a thinner ring, much like shepherds keep their flocks of sheep together. **Cassini might answer...** How do Prometheus and Pandora shepherd the F Ring? Are there other moons playing shepherding roles?

