

Figure 4

Saturn
Moon Card

Prometheus

Discovered by Stewart Collins and the Voyager team, 1980



Moving outward from Saturn, Prometheus (pro-MEE-thee-uss) is the third moon. Together with Pandora (the fourth moon), Prometheus 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, much 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?

Distance from Center of Saturn

139,350 km (86,590 mi)

Radius

$74 \times 50 \times 34$ km avg. = 53 km (33 mi)

Orbital Period

0.613 days (14.71 hrs)

Mass

Unknown

Orbital Speed

16.53 km/sec (10.27 mi/sec)

Surface Gravity

Unknown

Figure 5

Saturn
Moon Card

Pandora

Discovered by Stewart Collins and the Voyager team, 1980



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?

Distance from Center of Saturn

141,700 km (88,050 mi)

Radius

$55 \times 44 \times 31$ km avg. = 43 km (27 mi)

Orbital Period

0.628 days (15.07 hrs)

Mass

Unknown

Orbital Speed

16.38 km/sec (10.18 mi/sec)

Surface Gravity

Unknown

