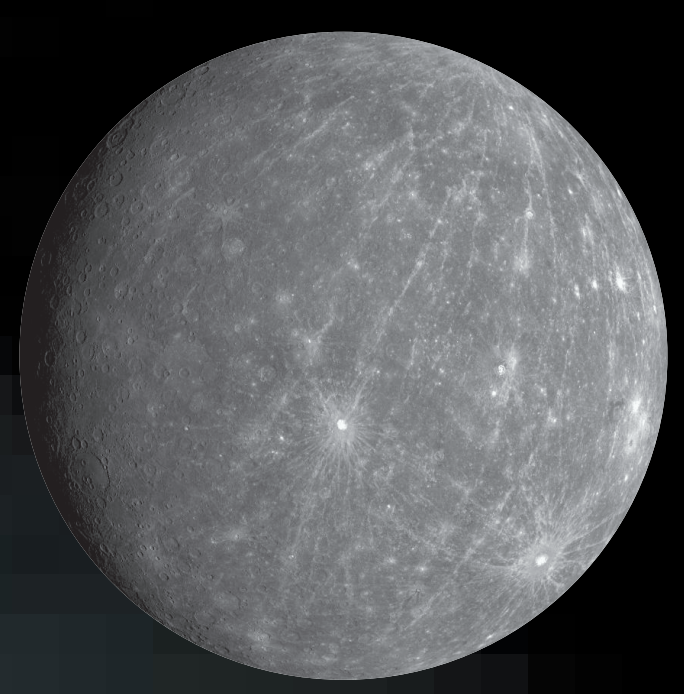


Our Solar System



Mercury

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 57,909,175 km (35,983,095 miles)
 Radius: 2439.7 km (1516 miles)
 Orbital Period: 88 Earth days
 Minimum Surface Temperature: -173 C (-279 F)
 Maximum Surface Temperature: 427 C (801 F)
 Surface Gravity: 38% of Earth's gravitational pull
 Atmosphere: Essentially None



Venus:

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 108,208,930 km (67,237,910 miles)
 Radius: 6,051.8 km (3760.4 miles)
 Orbital Period: 225 Earth days
 Average Surface Temperature: 462 C (864 F)
 Surface Gravity: 91% of Earth's gravitational pull
 Atmosphere: Essentially none



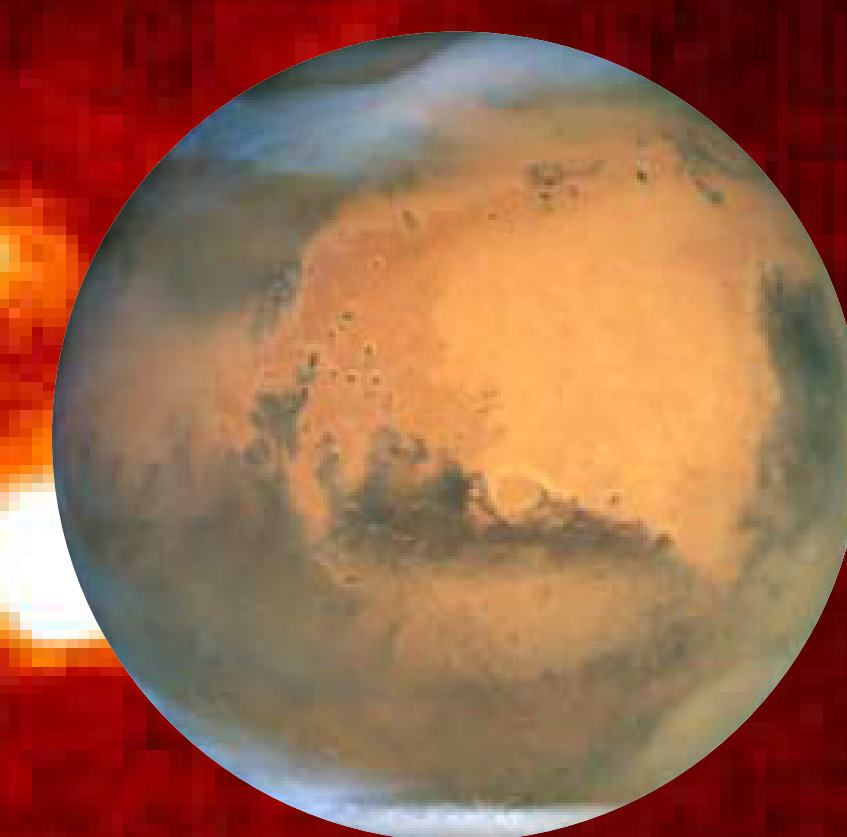
Earth:

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 149,597,890 km (92,955,820 miles)
 Radius: 6,378.14 km (3,963.19 miles)
 Orbital Period: 365 Earth days
 Minimum Surface Temperature: -88 C (-126 F)
 Maximum Surface Temperature: 58 C (136 F)
 Atmosphere: Nitrogen, Oxygen, Carbon Dioxide, and Argon



Earth's Moon:

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 384,400 km (238,855 miles)
 Radius: 1737.4 km (1079.6 miles)
 Orbital Period: 27 Earth days
 Minimum Surface Temperature: -233 C (-387 F)
 Maximum Surface Temperature: 123 C (253 F)
 Atmosphere: Essentially none



Mars:

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 227,936,640 km (141,633,620 miles)
 Equatorial Radius: 3,397 km (2,111 miles)
 Orbital Period: 687 Earth days
 Minimum Surface Temperature: -87 C (-125 F)
 Maximum Surface Temperature: -5 C (23 F)
 Surface Gravity: 38% of Earth's gravitational pull
 Atmosphere: Carbon Dioxide, Nitrogen, and Argon.



Phobos:
 Discovered by: A. Hall
 Date of Discovery: 1877
 Average Distance from Mars: 9,378 km (5,827 miles)
 Equatorial Radius: 3,357 km (2,111 miles)
 Orbital Period: 0.319 Earth days

Deimos:
 Discovered by: A. Hall
 Date of Discovery: 1877
 Average Distance from Mars: 23,459 km (14,577 miles)
 Equatorial Radius: 237.9 km (147.8 miles)
 Orbital Period: 1.262 Earth days

Jupiter:

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 778,412,020 km (483,682,810 miles)
 Equatorial Radius: 71,492 km (44,423 miles)
 Orbital Period: 4,331 Earth days
 Effective Temperature: -148 C (-243 F)
 Surface Gravity: 214% of Earth's gravitational pull
 Atmosphere: Hydrogen, Helium

Callisto:

Discovered by: Galileo Galilei
 Date of Discovery: 1610
 Average Distance from Jupiter: 1,883,000 km (1,170,042 miles)
 Equatorial radius: 2,403 km (1,493 miles)
 Orbital Period: 16.689 Earth days
 Atmosphere: Carbon Dioxide

Ganymede:

Discovered by: Galileo Galilei
 Date of Discovery: 1610
 Average Distance from Jupiter: 1,070,000 km (664,867 miles)
 Equatorial Radius: 2,634 km (1,637 miles)
 Orbital Period: 7.155 Earth days
 Atmosphere: Oxygen

Europa:

Discovered by: Galileo Galilei
 Date of Discovery: 1610
 Average Distance from Jupiter: 671,000 km (417,000 miles)
 Equatorial Radius: 1565 km (972 miles)
 Orbital Period: 3.551 Earth days
 Atmosphere: Oxygen

Io:

Discovered by: Galileo Galilei
 Date of Discovery: 1610
 Average Distance from Jupiter: 422,000 km (262,219 miles)
 Equatorial Radius: 6041719581 km (3,754,150,499 miles)
 Orbital Period: 1.769 Earth days

Saturn:

Discovered by: Known by the Ancients
 Date of Discovery: Unknown
 Average Distance from the Sun: 1,426,725,400 km (885,904,700 miles)
 Equatorial Radius: 60,268 km (37,449 miles)
 Orbital period: 10,756 Earth days
 Effective Temperature: -178 C (288 F)
 Surface Gravity 106% of Earth's gravitational pull
 Atmosphere: Hydrogen and Helium

Phoebe:

Discovered by: W. Pickering
 Date of Discovery: 1898
 Average Distance from Saturn: 12,952,000 km (8,048,000 miles)
 Equatorial Radius: 110 km
 Orbital Period: -550.480 Earth days (Retrograde)

Dione:

Discovered by: G.D. Cassini
 Date of Discovery: 1684
 Average Distance from Saturn: 377,400 km (234,505 miles)
 Equatorial Radius: 560 km (348 miles)
 Orbital Period: 2.737 Earth days

Iapetus:

Discovered by: G.D. Cassini
 Date of Discovery: 1671
 Average Distance from Saturn: 3,561,300 km (2,212,889 miles)
 Equatorial Radius: 736 km (457 miles)
 Orbital Period: 79.330 Earth days

Tethys:

Discovered by: G.D. Cassini
 Date of Discovery: 1684
 Average Distance from Saturn: 294,660 km (183,093 miles)
 Equatorial Radius: 529 km (329 miles)
 Orbital Period: 1.888 Earth days

Hyperion:

Discovered by: W. & G. Bond, W. Lassell
 Date of Discovery: 1848
 Average Distance from Saturn: 1,481,100 km (920,313 miles)
 Equatorial Radius: 205 km (127 miles)
 Orbital Period: 21.277 Earth days

Enceladus:

Discovered by: William Herschel
 Date of discovery: 1789
 Average Distance from Saturn: 238,020 km (147,899 miles)
 Equatorial Radius: 247 km (153 miles)
 Orbital Period: 1.370 Earth days

Titan:

Discovered by: C. Huygens
 Date of Discovery: 1655
 Average Distance from Saturn: 1,221,830 km (759,210 miles)
 Equatorial Radius: 2,575 km (1,600 miles)
 Orbital Period: 15.945 Earth days
 Atmosphere: Nitrogen, Methane

Mimas:

Discovered by: William Herschel
 Date of Discovery: 1789
 Average Distance from Saturn: 185,520 km (115,277 miles)
 Equatorial Radius: 196 km (122 miles)
 Orbital Period: 0.942 Earth days

Oberon:

Discovered by: W. Herschel
 Date of Discovery: 1787
 Average Distance from the Sun: 583,519 km (362,582 miles)
 Equatorial Radius: 761 km (473 miles)
 Orbital Period: 13.463 Earth days

Titania:

Discovered by: W. Herschel
 Date of Discovery: 1787
 Average Distance from the Sun: 436,298 km (271,103 miles)
 Equatorial Radius: 789 km (490 miles)
 Orbital Period: 8.706 Earth days

Umbriel:

Discovered by: W. Lassell
 Date of Discovery: 1851
 Average Distance from the Sun: 265,998 km (165,283 miles)
 Equatorial Radius: 585 km (364 miles)
 Orbital Period: 4.144 Earth days

Miranda:

Discovered by: G. Kuiper
 Date of Discovery: 1948
 Average Distance from the Sun: 129,872 km (80,699 miles)
 Equatorial Radius: 234 km (145 miles)
 Orbital Period: 1.413 Earth days

Nereid:

Discovered by: G. Kuiper
 Date of Discovery: 1949
 Average Distance from Neptune: 5,513,400 km (3,425,868 miles)
 Equatorial Radius: 170 km (106 miles)
 Orbital Period: 360 Earth days

Triton:

Discovered by: W. Lassell
 Date of Discovery: 1846
 Average Distance from Neptune: 354,760 km (220,438 miles)
 Equatorial Radius: 1,352 km (804 miles)
 Orbital Period: -5.877 Earth days (retrograde)

Uranus:

Discovered by: William Herschel
 Date of Discovery: 1781
 Average Distance from the Sun: 2,870,972,200 km (1,783,939,400 miles)
 Equatorial Radius: 25,559 km (15,882 miles)
 Orbital Period: 30,687 Earth days
 Effective Temperature: -216 C (-357 F)
 Surface Gravity: 86% of Earth's gravitational pull
 Atmosphere: Hydrogen, Helium, Methane

Neptune:

Discovered by: Johann Galle
 Date of Discovery: 1846
 Average Distance from the Sun: 4,498,252,900 km (2,795,084,800 miles)
 Equatorial Radius: 24,764 km (15,388 miles)
 Orbital Period: 60,190 Earth days
 Effective Temperature: -214 C (-353 F)
 Surface Gravity: 110% of Earth's gravitational pull
 Atmosphere: Hydrogen, Helium, Methane

The Fine Print:
 The images of the Sun, planets and moons are to scale. Not all of the moons are listed for Jupiter, Saturn, Neptune, and Uranus. All images are from NASA missions.

Find out more at <http://outreach.jach.hawaii.edu>

For a hardcopy of this poster please contact outreach@jach.hawaii.edu

The poster is created by:
 Quinn Hamamoto
 Waiakaa High School
 Hilo, Hawaii
 Grade 12
 Summer '10 Hui'ana Intern

