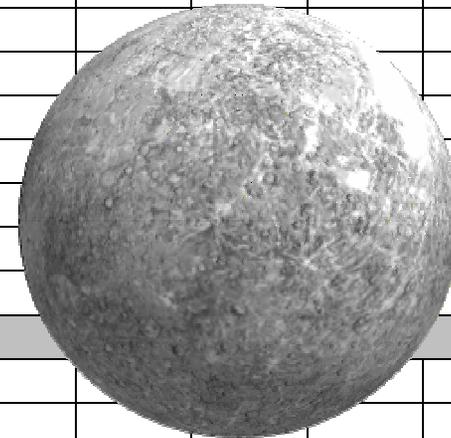


Fast Facts About Mercury

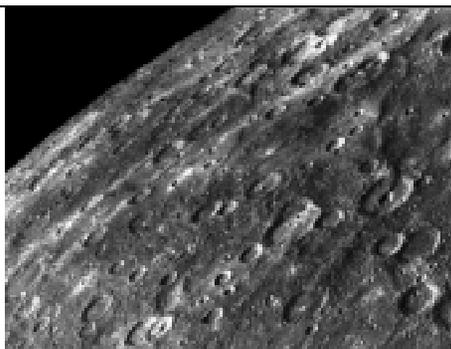
Planetary Parameters		Ratio (Mercury/Earth)									
Planet Type	Terrestrial (i.e., a solid, rocky planet like Earth)										
Average Distance from Sun (kilometer)	57,910,000 as compared to Earth's 149,600,000	0.39									
Equatorial Diameter (kilometer)	4,878 as compared to Earth's 12,756	0.38									
Mass (10 ²⁴ kilogram)	0.33 as compared to Earth's 5.9736	0.06									
Volume (10 ¹⁰ kilometer ³)	6.1 as compared to Earth's 108.321	0.06									
Average Density (gram/centimeter ³)	5.43 as compared to Earth's 5.52	0.98									
Surface Gravity (meter/second ²)	3.7 as compared to Earth's 9.78	0.38									
Magnetic Field (gauss-Rh ³)	0.0033 as compared to Earth's 0.3076	0.01									
Orbital Parameters											
Year Length (One Orbit Around the Sun)	87.9 Earth days										
Day Length (One Rotation on its Axis)	58.8 Earth days										
Inclination of Axis (degrees)	0.1 as compared to Earth's 23.45										
Atmosphere and Climate											
Average Surface Temperature (C)	167 as compared to Earth's 14.8										
Maximum Temperature (C)	452 on the sunny side as compared to Earth's 47										
Minimum Temperature (C)	-183 on the shady side as compared to Earth's -33										
Atmospheric Pressure at Surface	1 x 10 ⁻¹² millibar (Earth = 1,014 millibar)										
Major Atmospheric Gasses	42% Oxygen, 29% Sodium, 22% Hydrogen, 6% Helium, 0.5% Potassium, trace water vapor and carbon dioxide										
Summary of Water	No surface water or rainfall										
Summary of Climate	Most of the gasses in the atmosphere have been stripped away by the intense solar wind to which Mercury is exposed. With so little gas, no climate exists.										
Planetary Features											
General Overview	Looks like Earth's moon. Surface is fractured with compressive fractures that occurred when Mercury shrank after its core and mantle cooled.										
Composition of Poles	Amazingly, two ice poles may possibly exist at the bottom of deep craters that provide perpetual shadow.										
Core Composition	A cold core comprised of iron and nickel										
Known Moons/Rings	No moons, no rings										
Visits to Mercury											
1950-99	In 1974, Mariner 10 flew by twice, and once again in 1975. Only half of the planet has been imaged.										



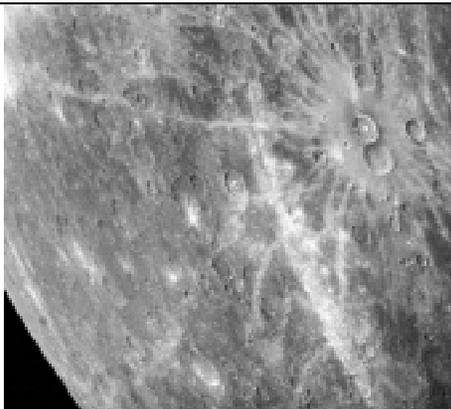
Some Views of the Planet Mercury



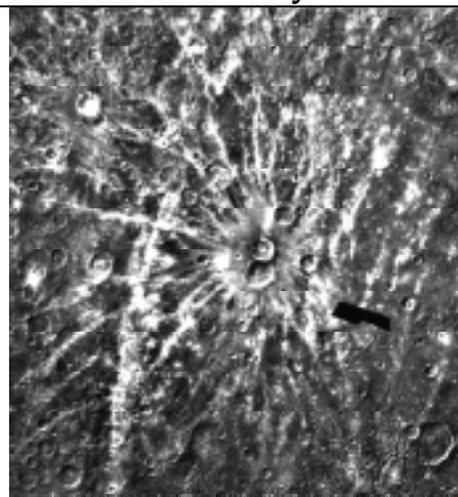
(1) In 1974 and 1975, Mariner 10 flew past Mercury three times. It is the only mission to visit Mercury. This image was taken from 200,000 km away. The light-colored crater in the upper-left is 160-km across.



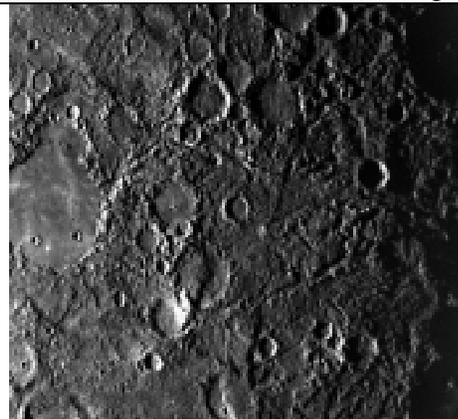
(2) This view of Mercury is 500 km across. You can see a faint ridge snaking along the right side of the image. This is the 450-km long Antoniadi ridge. You can see it best as it crosses an 80-km wide crater in the right center of the image.



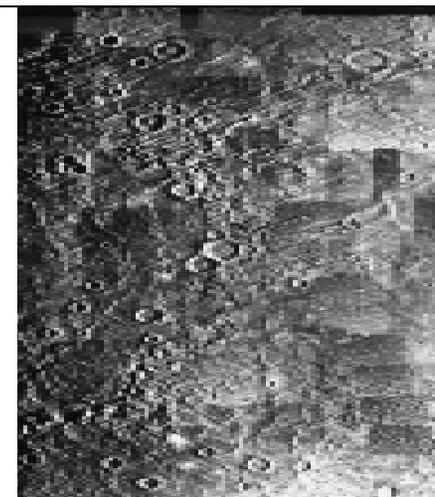
(5) This view of Degas crater shows the light-colored rays covering other features, indicating that the rays are younger features. By counting how many craters are in an area and by looking at how the debris thrown from the crater covers the surrounding features, people can figure out the age of an area or event. Degas is one of the most recent craters on Mercury.



(3) The bright-rayed Degas crater is 45-km across. The image is made from several smaller ones. The black section shows where some information is missing.



(6) This hilly terrain is exactly opposite the Caloris Basin. Shock waves from the impact that created the Caloris Basin were focused on this point after they traveled through Mercury. They broke the crust into a series of complex, jumbled blocks. This image is 100 km across and the large crater on the left is 35 km across. North is toward the top of the image.



(4) The 1,300-km wide Caloris Basin, Mercury's most prominent feature, formed when a massive, asteroid-sized object collided with Mercury early in its history.



(7) Murasaki crater (the large crater in left center) is 125 km across. You can tell that the Kuiper crater on its rim is younger because it is on top of the older crater. Hiroshige crater (right) is 140 km in diameter. North is toward the top of the image.