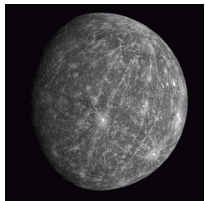


Name: _____

Calculate Your Weight on Other Worlds



Mercury is the smallest planet, and the planet closest to the sun.
The gravity of Mercury is 38% of Earth's gravity.
To calculate your weight on Mercury, multiply your weight by 0.38.

$$\begin{array}{ccccccc} \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \\ \text{(Your weight on Earth)} & \text{(units - lbs or kg)} & & \text{(multiply by)} & & \text{(Your weight on Mercury)} & \text{(units - lbs or kg)} \end{array}$$



Venus is known as the "Cloudy Planet" because it is covered with thick, yellow clouds.
The gravity of Venus is 90% of Earth's gravity.
To calculate your weight on Venus, multiply your weight by 0.9.

$$\begin{array}{ccccccc} \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \\ \text{(Your weight on Earth)} & \text{(units - lbs or kg)} & & \text{(multiply by)} & & \text{(Your weight on Venus)} & \text{(units - lbs or kg)} \end{array}$$



The Earth's moon is the only heavenly body that people have walked on.
The gravity of the moon is 17% of Earth's gravity.
To calculate your weight on the Moon, multiply your weight by 0.17.

$$\begin{array}{ccccccc} \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \\ \text{(Your weight on Earth)} & \text{(units - lbs or kg)} & & \text{(multiply by)} & & \text{(Your weight on the Moon)} & \text{(units - lbs or kg)} \end{array}$$



Mars is known as the "Red Planet" because the soil is filled with orange-red particles.
The gravity of Mars is 38% of Earth's gravity.
To calculate your weight on Mars, multiply your weight by 0.38.

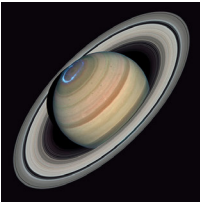
$$\begin{array}{ccccccc} \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \\ \text{(Your weight on Earth)} & \text{(units - lbs or kg)} & & \text{(multiply by)} & & \text{(Your weight on Mars)} & \text{(units - lbs or kg)} \end{array}$$



Jupiter has more moons than any other planet. So far, scientists have discovered 63!
The gravity of Jupiter is 234% of Earth's gravity.
To calculate your weight on Jupiter, multiply your weight by 2.34.

$$\begin{array}{ccccccc} \underline{\hspace{2cm}} & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} & \underline{\hspace{2cm}} \\ \text{(Your weight on Earth)} & \text{(units - lbs or kg)} & & \text{(multiply by)} & & \text{(Your weight on Jupiter)} & \text{(units - lbs or kg)} \end{array}$$

Calculate Your Weight on Other Worlds



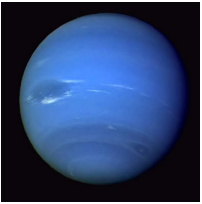
Saturn is known as the "Ringed Planet" because it has rings made of rock and ice. The gravity of Saturn is 108% of Earth's gravity. To calculate your weight on Saturn, multiply your weight by 1.08.

_____ x _____ = _____
 (Your weight on Earth) (units - lbs or kg) (multiply by) (Your weight on Saturn) (units - lbs or kg)



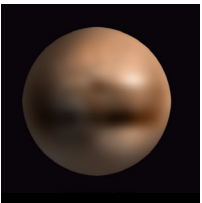
Uranus spins sideways. It's north pole and south pole are on the sides. The gravity of Uranus is 80% of Earth's gravity. To calculate your weight on Uranus, multiply your weight by 0.8.

_____ x _____ = _____
 (Your weight on Earth) (units - lbs or kg) (multiply by) (Your weight on Uranus) (units - lbs or kg)



Neptune is a blue planet with extremely strong winds. The gravity of Neptune is 112% of Earth's gravity. To calculate your weight on Neptune, multiply your weight by 1.12.

_____ x _____ = _____
 (Your weight on Earth) (units - lbs or kg) (multiply by) (Your weight on Neptune) (units - lbs or kg)



Scientists no longer consider Pluto a planet. It's now considered a "Dwarf Planet." The gravity of Pluto is 7% of Earth's gravity. To calculate your weight on Pluto, multiply your weight by 0.07.

_____ x _____ = _____
 (Your weight on Earth) (units - lbs or kg) (multiply by) (Your weight on Pluto) (units - lbs or kg)

How much more would you weigh on Jupiter than Earth? Show your work.

answer: _____

How much less would you weigh on Pluto than Earth? Show your work.

answer: _____

Would you weigh more on the Earth's moon, or on Mercury?

answer: _____