

# Our Solar System

Relative size and interesting facts for all known objects over 1500 km in diameter (and two notable others). Positions not to scale; approximately true color.

**Eris**  
DWARF PLANET—SCATTERED DISK  
Eris is covered in ices; it partly thaws when it nears the Sun every 557 years.

**Pluto**  
DWARF PLANET—KUIPER BELT  
Valleys carved by nitrogen glaciers and tall mountains of ice border a windswept plain.

**Neptune**  
GAS GIANT PLANET  
Neptune has very active weather systems, including the strongest sustained winds in the solar system: up to 2100 km/h.

**Uranus**  
GAS GIANT PLANET  
The axis of rotation of Uranus is tilted sideways, probably due to a collision with an Earth-sized object soon after it formed.

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## Saturn

GAS GIANT PLANET  
The rings of Saturn consist of innumerable small clumps of ice and dust orbiting the planet together.

LARGEST MOONS OF SATURN  
Iapetus: A 13 km high ridge runs halfway around its equator.  
Titan: Has rivers, lakes, and rain made of liquified natural gas.  
Rhea: Giant ice cliffs from tectonic activity streak its surface.

### LARGEST MOONS OF URANUS

Titania: Enormous canyons: one goes nearly from equator to pole.  
Oberon: Its ancient surface is almost entirely covered with craters.

## Sun

MAIN SEQUENCE STAR  
The Sun's hot plasma twists its powerful magnetic field into knots, causing sunspots and intense solar flares.

## Mercury

TERRESTRIAL PLANET  
Mercury rotates so slowly that sunrise to sunset lasts a full Mercury year (about 88 Earth days).

The Moon (OF EARTH)  
Probably formed when a Mars-sized object collided with the early Earth.

### LARGEST MOONS OF JUPITER

Io: Over 400 active volcanoes due to Jupiter's gravity.  
Europa: Has an ocean of liquid water under its ice crust.  
Ganymede: So large that it creates its own magnetic field.  
Callisto: Stable surface and low radiation due to its wide orbit.

**Ceres**  
DWARF PLANET—ASTEROID BELT  
Ceres contains 1/3 of the mass of the entire asteroid belt.

## Venus

TERRESTRIAL PLANET  
Venus's thick CO<sub>2</sub> atmosphere and sulfuric acid clouds trap heat like a greenhouse: its surface is hot enough to melt lead!

## Earth

TERRESTRIAL PLANET  
On this tiny planet, alone in the vastness of space, every person you've ever loved has lived out their lives.

## Mars

TERRESTRIAL PLANET  
The ice caps of Mars grow a layer of dry ice each winter. In spring it turns back into CO<sub>2</sub> gas, causing 400 km/h winds and global dust storms.

## Jupiter

GAS GIANT PLANET  
Jupiter's ammonia cloud bands include the Great Red Spot, a vast vortex storm that has persisted for hundreds of years.

**Charon, A MOON OF PLUTO,**  
and Pluto itself mutually orbit a point between the two. (Separation and orbits shown to scale.)

**Triton, A MOON OF NEPTUNE**  
Orbits backward and has geysers of liquid nitrogen.



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