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This is an example of a multi-column Table of Contents spanning more than one page.

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Mercury

URL: http://pds.jpl.nasa.gov/planets/special/mercury.htm

Mercury is one of four terrestrial planets in the Solar System, and is a rocky body like the Earth. It is the smallest planet in the Solar System, with an equatorial radius of 2,439.7 km. Mercury is even smaller—albeit more massive—than the largest natural satellites in the Solar System, Ganymede and Titan. Mercury consists of approximately 70% metallic and 30% silicate material. Mercury's density is the second highest in the Solar System at 5.427 g/cm^3, only slightly less than Earth's density of 5.515 g/cm^3. If the effect of gravitational compression were to be factored out, the materials of which Mercury is made would be denser, with an uncompressed density of 5.3g/cm^3 versus Earth's 4.4g/cm^3. Mercury's density can be used to infer details of its inner structure. While the Earth's high density results appreciably from gravitational compression, particularly at the core, Mercury is much smaller and its inner regions are not nearly as strongly compressed. Therefore, for it to have such a high density, its core must be large and rich in iron.

Venus

URL: http://pds.jpl.nasa.gov/planets/special/venus.htm

Venus is the second planet from the Sun, orbiting it every 224.7 Earth days. The planet is named after the Roman goddess of love and beauty. After the Moon, it is the brightest natural object in the night sky, reaching an apparent magnitude of −4.6, bright enough to cast shadows. Because Venus is an inferior planet from Earth, it never appears to venture far from the Sun: its elongation reaches a maximum of 47.8°. Venus reaches its maximum brightness shortly before sunrise or shortly after sunset, for which reason it has been referred to by ancient cultures as the Morning Star or Evening Star. Venus is classified as a terrestrial planet and is sometimes called Earth's “sister planet” owing to their similar size, gravity, and bulk composition (Venus is both the closest planet to Earth and the planet closest in size to Earth). It is shrouded by an opaque layer of highly reflective clouds of sulfuric acid, preventing its surface from being seen from space in visible light. Venus has the densest atmosphere of the four terrestrial planets, consisting mostly of carbon dioxide. The atmospheric pressure at the planet's surface is 92 times that of Earth's. With a mean surface temperature of 735 K, Venus is by far the hottest planet in the Solar System. It has no carbon cycle to lock carbon back into rocks and surface features, nor does it seem to have any organic life to absorb it in biomass.

Earth

URL: http://pds.jpl.nasa.gov/planets/special/earth.htm

Moons

- Moon

Earth is the third planet from the Sun, and the densest and fifth-largest of the eight planets in the Solar System. It is also the largest of the Solar System's four terrestrial planets. It is sometimes referred to as the world, the Blue Planet, or by its Latin name, Terra. Earth formed approximately 4.54 billion years ago by accretion from the solar nebula, and life appeared on its surface within one billion years. The planet is home to millions of species, including humans. Earth's biosphere has significantly altered the atmosphere and other abiotic conditions on the planet, enabling the proliferation of aerobic organisms as well as the formation of the ozone layer, which together with Earth's magnetic field blocks harmful solar radiation, thus permitting formerly ocean-confined life to move safely to land. The physical properties of the Earth, as well as its geological history and orbit, have allowed life to persist. Estimates on how much longer the planet will to be able to continue to support life range from 500 million years, to as long as 2.3 billion years. Earth's crust is divided into several rigid segments, or tectonic plates, that migrate across the surface over periods of many millions of years.

Mars

URL: http://pds.jpl.nasa.gov/planets/special/mars.htm

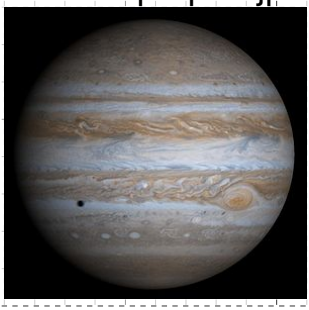
Moons

- Phobos
- Deimos

Mars is the fourth planet from the Sun and the second smallest planet in the Solar System. Named after the Roman god of war, it is often described as the “Red Planet”, as the iron oxide prevalent on its surface gives it a reddish appearance. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent both of the impact craters of the Moon and the volcanoes, valleys, deserts, and polar ice caps of Earth. The rotational period and seasonal cycles of Mars are likewise similar to those of Earth, as is the tilt that produces the seasons. Mars is the site of Olympus Mons, the highest known mountain within the Solar System, and of Valles Marineris, one of the largest canyons. The smooth Borealis basin in the northern hemisphere covers 40% of the planet and may be a giant impact feature. Mars has two moons, Phobos and Deimos, which are small and irregularly shaped. These may be captured asteroids, similar to 5261 Eureka, a Martian trojan asteroid.

Jupiter

URL: http://pds.jpl.nasa.gov/planets/special/jupiter.htm



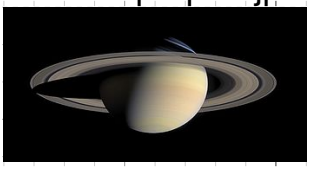
Moons

- Ganymede
- Callisto
- Io
- Europa
- Metis
- ...

Jupiter is the fifth planet from the Sun and the largest planet within the Solar System. It is a gas giant with mass one-thousandth that of the Sun but is two and a half times the mass of all the other planets in our Solar System combined. Jupiter is classified as a gas giant along with Saturn, Uranus and Neptune. Together, these four planets are sometimes referred to as the Jovian or outer planets. The planet was known by astronomers of ancient times, and was associated with the mythology and religious beliefs of many cultures. The Romans named the planet after the Roman god Jupiter. When viewed from Earth, Jupiter can reach an apparent magnitude of −2.94, making it on average the third-brightest object in the night sky after the Moon and Venus. (Mars can briefly match Jupiter's brightness at certain points in its orbit.)

Saturn

URL: http://pds.jpl.nasa.gov/planets/special/saturn.htm



Moons

- Titan
- Rhea
- Iapetus
- Dione
- Tethys
- Enceladus
- Mimas
- ...

Saturn is the sixth planet from the Sun and the second largest planet in the Solar System, after Jupiter. Named after the Roman god Saturn, its astronomical symbol () represents the god's sickle. Saturn is a gas giant with an average radius about nine times that of Earth. While only one-eighth the average density of Earth, with its larger volume Saturn is just over 95 times as massive as Earth. Saturn's interior is probably composed of a core of iron, nickel and rock (silicon and oxygen compounds), surrounded by a deep layer of metallic hydrogen, an intermediate layer of liquid hydrogen and liquid helium and an outer gaseous layer. The planet exhibits a pale yellow hue due to ammonia crystals in its upper atmosphere. Electrical current within the metallic hydrogen layer is thought to give rise to Saturn's planetary magnetic field, which is slightly weaker than Earth's and around one-twentieth the strength of Jupiter's. The outer atmosphere is generally bland and lacking in contrast, although long-lived features can appear. Wind speeds on Saturn can reach 1,800 km/h (1,100 mph), faster than on Jupiter, but not as fast as those on Neptune.

Uranus

URL: http://pds.jpl.nasa.gov/planets/special/uranus.htm

Moons

- Titania
- Oberon
- Ariel
- Umbriel
- Miranda
- ...

Uranus is the seventh planet from the Sun. It has the third-largest planetary radius and fourth-largest planetary mass in the Solar System. It is named after the ancient Greek deity of the sky Uranus (Ancient Greek: Ορανς), the father of Cronus (Saturn) and grandfather of Zeus (Jupiter). Though it is visible to the naked eye like the five classical planets, it was never recognized as a planet by ancient observers because of its dimness and slow orbit. Sir William Herschel announced its discovery on March 13, 1781, expanding the known boundaries of the Solar System for the first time in modern history. Uranus was also the first planet discovered with a telescope.

Neptune

URL: http://pds.jpl.nasa.gov/planets/special/neptune.htm

Moons

- Triton
- Proteus
- Nereid
- Naiad
- Neso
- ...

Neptune is the eighth and farthest planet from the Sun in the Solar System. It is the fourth-largest planet by diameter and the third-largest by mass. Neptune is 17 times the mass of Earth and is somewhat more massive than its near-twin Uranus, which is 15 times the mass of Earth but not as dense. On average, Neptune orbits the Sun at a distance of 30.1 AU, approximately 30 times the Earth–Sun distance. Named for the Roman god of the sea, its astronomical symbol is , a stylized version of the god Neptune's trident. Neptune was the first planet found by mathematical prediction rather than by empirical observation. Unexpected changes in the orbit of Uranus led Alexis Bouvard to deduce that its orbit was subject to gravitational perturbation by an unknown planet. Neptune was subsequently observed on September 23, 1846 by Johann Galle within a degree of the position predicted by Urbain Le Verrier, and its largest moon, Triton, was discovered shortly thereafter, though none of the planet's remaining 12 moons were located telescopically until the 20th century. Neptune has been visited by only one spacecraft, Voyager 2, which flew by the planet on August 25, 1989.

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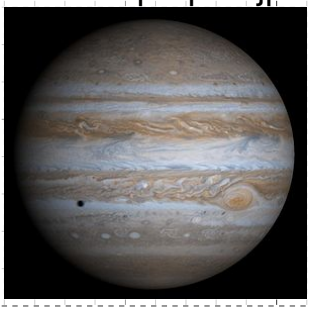

Moons

- Ganymede
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- Io
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- ...

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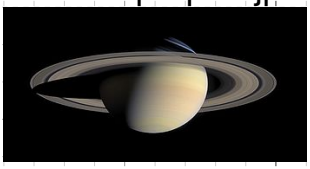

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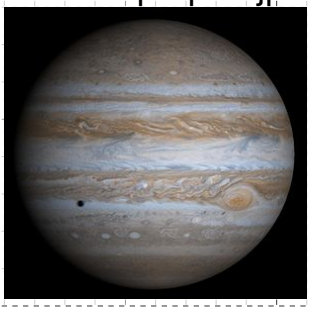

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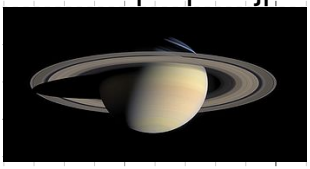

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Venus is the second planet from the Sun, orbiting it every 224.7 Earth days. The planet is named after the Roman goddess of love and beauty. After the Moon, it is the brightest natural object in the night sky, reaching an apparent magnitude of −4.6, bright enough to cast shadows. Because Venus is an inferior planet from Earth, it never appears to venture far from the Sun: its elongation reaches a maximum of 47.8°. Venus reaches its maximum brightness shortly before sunrise or shortly after sunset, for which reason it has been referred to by ancient cultures as the Morning Star or Evening Star. Venus is classified as a terrestrial planet and is sometimes called Earth's “sister planet” owing to their similar size, gravity, and bulk composition (Venus is both the closest planet to Earth and the planet closest in size to Earth). It is shrouded by an opaque layer of highly reflective clouds of sulfuric acid, preventing its surface from being seen from space in visible light. Venus has the densest atmosphere of the four terrestrial planets, consisting mostly of carbon dioxide. The atmospheric pressure at the planet's surface is 92 times that of Earth's. With a mean surface temperature of 735 K, Venus is by far the hottest planet in the Solar System. It has no carbon cycle to lock carbon back into rocks and surface features, nor does it seem to have any organic life to absorb it in biomass.

Earth

URL: http://pds.jpl.nasa.gov/planets/special/earth.htm

Moons

- Moon

Earth is the third planet from the Sun, and the densest and fifth-largest of the eight planets in the Solar System. It is also the largest of the Solar System's four terrestrial planets. It is sometimes referred to as the world, the Blue Planet, or by its Latin name, Terra. Earth formed approximately 4.54 billion years ago by accretion from the solar nebula, and life appeared on its surface within one billion years. The planet is home to millions of species, including humans. Earth's biosphere has significantly altered the atmosphere and other abiotic conditions on the planet, enabling the proliferation of aerobic organisms as well as the formation of the ozone layer, which together with Earth's magnetic field blocks harmful solar radiation, thus permitting formerly ocean-confined life to move safely to land. The physical properties of the Earth, as well as its geological history and orbit, have allowed life to persist. Estimates on how much longer the planet will to be able to continue to support life range from 500 million years, to as long as 2.3 billion years. Earth's crust is divided into several rigid segments, or tectonic plates, that migrate across the surface over periods of many millions of years.

Mars

URL: http://pds.jpl.nasa.gov/planets/special/mars.htm

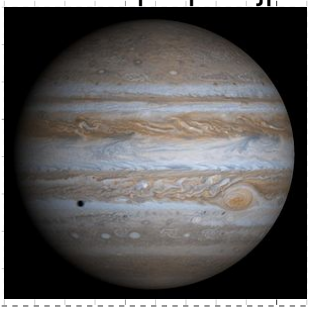
Moons

- Phobos
- Deimos

Mars is the fourth planet from the Sun and the second smallest planet in the Solar System. Named after the Roman god of war, it is often described as the “Red Planet”, as the iron oxide prevalent on its surface gives it a reddish appearance. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent both of the impact craters of the Moon and the volcanoes, valleys, deserts, and polar ice caps of Earth. The rotational period and seasonal cycles of Mars are likewise similar to those of Earth, as is the tilt that produces the seasons. Mars is the site of Olympus Mons, the highest known mountain within the Solar System, and of Valles Marineris, one of the largest canyons. The smooth Borealis basin in the northern hemisphere covers 40% of the planet and may be a giant impact feature. Mars has two moons, Phobos and Deimos, which are small and irregularly shaped. These may be captured asteroids, similar to 5261 Eureka, a Martian trojan asteroid.

Jupiter

URL: http://pds.jpl.nasa.gov/planets/special/jupiter.htm



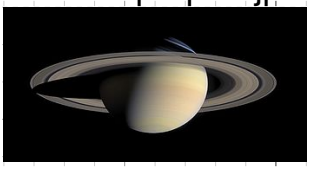
Moons

- Ganymede
- Callisto
- Io
- Europa
- Metis
- ...

Jupiter is the fifth planet from the Sun and the largest planet within the Solar System. It is a gas giant with mass one-thousandth that of the Sun but is two and a half times the mass of all the other planets in our Solar System combined. Jupiter is classified as a gas giant along with Saturn, Uranus and Neptune. Together, these four planets are sometimes referred to as the Jovian or outer planets. The planet was known by astronomers of ancient times, and was associated with the mythology and religious beliefs of many cultures. The Romans named the planet after the Roman god Jupiter. When viewed from Earth, Jupiter can reach an apparent magnitude of −2.94, making it on average the third-brightest object in the night sky after the Moon and Venus. (Mars can briefly match Jupiter's brightness at certain points in its orbit.)

Saturn

URL: http://pds.jpl.nasa.gov/planets/special/saturn.htm



Moons

- Titan
- Rhea
- Iapetus
- Dione
- Tethys
- Enceladus
- Mimas
- ...

Saturn is the sixth planet from the Sun and the second largest planet in the Solar System, after Jupiter. Named after the Roman god Saturn, its astronomical symbol () represents the god's sickle. Saturn is a gas giant with an average radius about nine times that of Earth. While only one-eighth the average density of Earth, with its larger volume Saturn is just over 95 times as massive as Earth. Saturn's interior is probably composed of a core of iron, nickel and rock (silicon and oxygen compounds), surrounded by a deep layer of metallic hydrogen, an intermediate layer of liquid hydrogen and liquid helium and an outer gaseous layer. The planet exhibits a pale yellow hue due to ammonia crystals in its upper atmosphere. Electrical current within the metallic hydrogen layer is thought to give rise to Saturn's planetary magnetic field, which is slightly weaker than Earth's and around one-twentieth the strength of Jupiter's. The outer atmosphere is generally bland and lacking in contrast, although long-lived features can appear. Wind speeds on Saturn can reach 1,800 km/h (1,100 mph), faster than on Jupiter, but not as fast as those on Neptune.

Uranus

URL: http://pds.jpl.nasa.gov/planets/special/uranus.htm

Moons

- Titania
- Oberon
- Ariel
- Umbriel
- Miranda
- ...

Uranus is the seventh planet from the Sun. It has the third-largest planetary radius and fourth-largest planetary mass in the Solar System. It is named after the ancient Greek deity of the sky Uranus (Ancient Greek: Ορανς), the father of Cronus (Saturn) and grandfather of Zeus (Jupiter). Though it is visible to the naked eye like the five classical planets, it was never recognized as a planet by ancient observers because of its dimness and slow orbit. Sir William Herschel announced its discovery on March 13, 1781, expanding the known boundaries of the Solar System for the first time in modern history. Uranus was also the first planet discovered with a telescope.

Neptune

URL: http://pds.jpl.nasa.gov/planets/special/neptune.htm

Moons

- Triton
- Proteus
- Nereid
- Naiad
- Neso
- ...

Neptune is the eighth and farthest planet from the Sun in the Solar System. It is the fourth-largest planet by diameter and the third-largest by mass. Neptune is 17 times the mass of Earth and is somewhat more massive than its near-twin Uranus, which is 15 times the mass of Earth but not as dense. On average, Neptune orbits the Sun at a distance of 30.1 AU, approximately 30 times the Earth–Sun distance. Named for the Roman god of the sea, its astronomical symbol is , a stylized version of the god Neptune's trident. Neptune was the first planet found by mathematical prediction rather than by empirical observation. Unexpected changes in the orbit of Uranus led Alexis Bouvard to deduce that its orbit was subject to gravitational perturbation by an unknown planet. Neptune was subsequently observed on September 23, 1846 by Johann Galle within a degree of the position predicted by Urbain Le Verrier, and its largest moon, Triton, was discovered shortly thereafter, though none of the planet's remaining 12 moons were located telescopically until the 20th century. Neptune has been visited by only one spacecraft, Voyager 2, which flew by the planet on August 25, 1989.

Mercury

URL: http://pds.jpl.nasa.gov/planets/special/mercury.htm

Mercury is one of four terrestrial planets in the Solar System, and is a rocky body like the Earth. It is the smallest planet in the Solar System, with an equatorial radius of 2,439.7 km. Mercury is even smaller—albeit more massive—than the largest natural satellites in the Solar System, Ganymede and Titan. Mercury consists of approximately 70% metallic and 30% silicate material. Mercury's density is the second highest in the Solar System at 5.427 g/cm^3, only slightly less than Earth's density of 5.515 g/cm^3. If the effect of gravitational compression were to be factored out, the materials of which Mercury is made would be denser, with an uncompressed density of 5.3g/cm^3 versus Earth's 4.4g/cm^3. Mercury's density can be used to infer details of its inner structure. While the Earth's high density results appreciably from gravitational compression, particularly at the core, Mercury is much smaller and its inner regions are not nearly as strongly compressed. Therefore, for it to have such a high density, its core must be large and rich in iron.

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Moons

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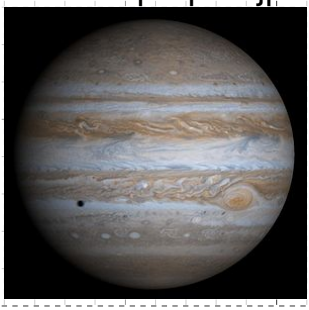

Moons

- Ganymede
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- Europa
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- ...

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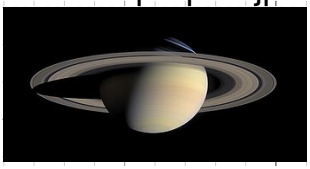

Moons

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Moons

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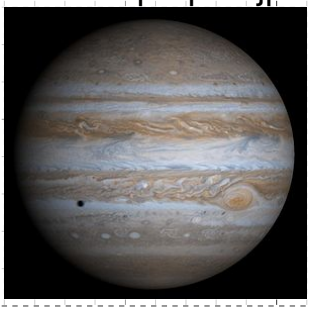

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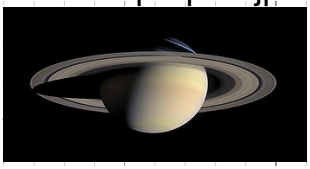

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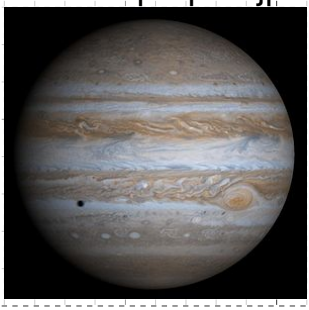
Moons

- Phobos
- Deimos

Mars is the fourth planet from the Sun and the second smallest planet in the Solar System. Named after the Roman god of war, it is often described as the “Red Planet”, as the iron oxide prevalent on its surface gives it a reddish appearance. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent both of the impact craters of the Moon and the volcanoes, valleys, deserts, and polar ice caps of Earth. The rotational period and seasonal cycles of Mars are likewise similar to those of Earth, as is the tilt that produces the seasons. Mars is the site of Olympus Mons, the highest known mountain within the Solar System, and of Valles Marineris, one of the largest canyons. The smooth Borealis basin in the northern hemisphere covers 40% of the planet and may be a giant impact feature. Mars has two moons, Phobos and Deimos, which are small and irregularly shaped. These may be captured asteroids, similar to 5261 Eureka, a Martian trojan asteroid.

Jupiter

URL: http://pds.jpl.nasa.gov/planets/special/jupiter.htm



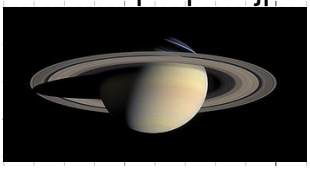
Moons

- Ganymede
- Callisto
- Io
- Europa
- Metis
- ...

Jupiter is the fifth planet from the Sun and the largest planet within the Solar System. It is a gas giant with mass one-thousandth that of the Sun but is two and a half times the mass of all the other planets in our Solar System combined. Jupiter is classified as a gas giant along with Saturn, Uranus and Neptune. Together, these four planets are sometimes referred to as the Jovian or outer planets. The planet was known by astronomers of ancient times, and was associated with the mythology and religious beliefs of many cultures. The Romans named the planet after the Roman god Jupiter. When viewed from Earth, Jupiter can reach an apparent magnitude of −2.94, making it on average the third-brightest object in the night sky after the Moon and Venus. (Mars can briefly match Jupiter's brightness at certain points in its orbit.)

Saturn

URL: http://pds.jpl.nasa.gov/planets/special/saturn.htm



Moons

- Titan
- Rhea
- Iapetus
- Dione
- Tethys
- Enceladus
- Mimas
- ...

Saturn is the sixth planet from the Sun and the second largest planet in the Solar System, after Jupiter. Named after the Roman god Saturn, its astronomical symbol () represents the god's sickle. Saturn is a gas giant with an average radius about nine times that of Earth. While only one-eighth the average density of Earth, with its larger volume Saturn is just over 95 times as massive as Earth. Saturn's interior is probably composed of a core of iron, nickel and rock (silicon and oxygen compounds), surrounded by a deep layer of metallic hydrogen, an intermediate layer of liquid hydrogen and liquid helium and an outer gaseous layer. The planet exhibits a pale yellow hue due to ammonia crystals in its upper atmosphere. Electrical current within the metallic hydrogen layer is thought to give rise to Saturn's planetary magnetic field, which is slightly weaker than Earth's and around one-twentieth the strength of Jupiter's. The outer atmosphere is generally bland and lacking in contrast, although long-lived features can appear. Wind speeds on Saturn can reach 1,800 km/h (1,100 mph), faster than on Jupiter, but not as fast as those on Neptune.

Uranus

URL: http://pds.jpl.nasa.gov/planets/special/uranus.htm

Moons

- Titania
- Oberon
- Ariel
- Umbriel
- Miranda
- ...

Uranus is the seventh planet from the Sun. It has the third-largest planetary radius and fourth-largest planetary mass in the Solar System. It is named after the ancient Greek deity of the sky Uranus (Ancient Greek: Ορανς), the father of Cronus (Saturn) and grandfather of Zeus (Jupiter). Though it is visible to the naked eye like the five classical planets, it was never recognized as a planet by ancient observers because of its dimness and slow orbit. Sir William Herschel announced its discovery on March 13, 1781, expanding the known boundaries of the Solar System for the first time in modern history. Uranus was also the first planet discovered with a telescope.

Neptune

URL: http://pds.jpl.nasa.gov/planets/special/neptune.htm

Moons

- Triton
- Proteus
- Nereid
- Naiad
- Neso
- ...

Neptune is the eighth and farthest planet from the Sun in the Solar System. It is the fourth-largest planet by diameter and the third-largest by mass. Neptune is 17 times the mass of Earth and is somewhat more massive than its near-twin Uranus, which is 15 times the mass of Earth but not as dense. On average, Neptune orbits the Sun at a distance of 30.1 AU, approximately 30 times the Earth–Sun distance. Named for the Roman god of the sea, its astronomical symbol is , a stylized version of the god Neptune's trident. Neptune was the first planet found by mathematical prediction rather than by empirical observation. Unexpected changes in the orbit of Uranus led Alexis Bouvard to deduce that its orbit was subject to gravitational perturbation by an unknown planet. Neptune was subsequently observed on September 23, 1846 by Johann Galle within a degree of the position predicted by Urbain Le Verrier, and its largest moon, Triton, was discovered shortly thereafter, though none of the planet's remaining 12 moons were located telescopically until the 20th century. Neptune has been visited by only one spacecraft, Voyager 2, which flew by the planet on August 25, 1989.

Mercury

URL: http://pds.jpl.nasa.gov/planets/special/mercury.htm

Mercury is one of four terrestrial planets in the Solar System, and is a rocky body like the Earth. It is the smallest planet in the Solar System, with an equatorial radius of 2,439.7 km. Mercury is even smaller—albeit more massive—than the largest natural satellites in the Solar System, Ganymede and Titan. Mercury consists of approximately 70% metallic and 30% silicate material. Mercury's density is the second highest in the Solar System at 5.427 g/cm^3, only slightly less than Earth's density of 5.515 g/cm^3. If the effect of gravitational compression were to be factored out, the materials of which Mercury is made would be denser, with an uncompressed density of 5.3g/cm^3 versus Earth's 4.4g/cm^3. Mercury's density can be used to infer details of its inner structure. While the Earth's high density results appreciably from gravitational compression, particularly at the core, Mercury is much smaller and its inner regions are not nearly as strongly compressed. Therefore, for it to have such a high density, its core must be large and rich in iron.

Venus

URL: http://pds.jpl.nasa.gov/planets/special/venus.htm

Venus is the second planet from the Sun, orbiting it every 224.7 Earth days. The planet is named after the Roman goddess of love and beauty. After the Moon, it is the brightest natural object in the night sky, reaching an apparent magnitude of −4.6, bright enough to cast shadows. Because Venus is an inferior planet from Earth, it never appears to venture far from the Sun: its elongation reaches a maximum of 47.8°. Venus reaches its maximum brightness shortly before sunrise or shortly after sunset, for which reason it has been referred to by ancient cultures as the Morning Star or Evening Star. Venus is classified as a terrestrial planet and is sometimes called Earth's “sister planet” owing to their similar size, gravity, and bulk composition (Venus is both the closest planet to Earth and the planet closest in size to Earth). It is shrouded by an opaque layer of highly reflective clouds of sulfuric acid, preventing its surface from being seen from space in visible light. Venus has the densest atmosphere of the four terrestrial planets, consisting mostly of carbon dioxide. The atmospheric pressure at the planet's surface is 92 times that of Earth's. With a mean surface temperature of 735 K, Venus is by far the hottest planet in the Solar System. It has no carbon cycle to lock carbon back into rocks and surface features, nor does it seem to have any organic life to absorb it in biomass.

Earth

URL: http://pds.jpl.nasa.gov/planets/special/earth.htm

Moons

- Moon

Earth is the third planet from the Sun, and the densest and fifth-largest of the eight planets in the Solar System. It is also the largest of the Solar System's four terrestrial planets. It is sometimes referred to as the world, the Blue Planet, or by its Latin name, Terra. Earth formed approximately 4.54 billion years ago by accretion from the solar nebula, and life appeared on its surface within one billion years. The planet is home to millions of species, including humans. Earth's biosphere has significantly altered the atmosphere and other abiotic conditions on the planet, enabling the proliferation of aerobic organisms as well as the formation of the ozone layer, which together with Earth's magnetic field blocks harmful solar radiation, thus permitting formerly ocean-confined life to move safely to land. The physical properties of the Earth, as well as its geological history and orbit, have allowed life to persist. Estimates on how much longer the planet will to be able to continue to support life range from 500 million years, to as long as 2.3 billion years. Earth's crust is divided into several rigid segments, or tectonic plates, that migrate across the surface over periods of many millions of years.

Mars

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Moons

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- Deimos

Mars is the fourth planet from the Sun and the second smallest planet in the Solar System. Named after the Roman god of war, it is often described as the “Red Planet”, as the iron oxide prevalent on its surface gives it a reddish appearance. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent both of the impact craters of the Moon and the volcanoes, valleys, deserts, and polar ice caps of Earth. The rotational period and seasonal cycles of Mars are likewise similar to those of Earth, as is the tilt that produces the seasons. Mars is the site of Olympus Mons, the highest known mountain within the Solar System, and of Valles Marineris, one of the largest canyons. The smooth Borealis basin in the northern hemisphere covers 40% of the planet and may be a giant impact feature. Mars has two moons, Phobos and Deimos, which are small and irregularly shaped. These may be captured asteroids, similar to 5261 Eureka, a Martian trojan asteroid.

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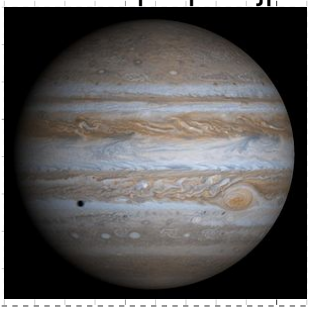

Moons

- Ganymede
- Callisto
- Io
- Europa
- Metis
- ...

Jupiter is the fifth planet from the Sun and the largest planet within the Solar System. It is a gas giant with mass one-thousandth that of the Sun but is two and a half times the mass of all the other planets in our Solar System combined. Jupiter is classified as a gas giant along with Saturn, Uranus and Neptune. Together, these four planets are sometimes referred to as the Jovian or outer planets. The planet was known by astronomers of ancient times, and was associated with the mythology and religious beliefs of many cultures. The Romans named the planet after the Roman god Jupiter. When viewed from Earth, Jupiter can reach an apparent magnitude of −2.94, making it on average the third-brightest object in the night sky after the Moon and Venus. (Mars can briefly match Jupiter's brightness at certain points in its orbit.)

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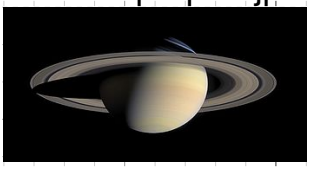

Moons

- Titan
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Moons

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Moons

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Moons

- Phobos
- Deimos

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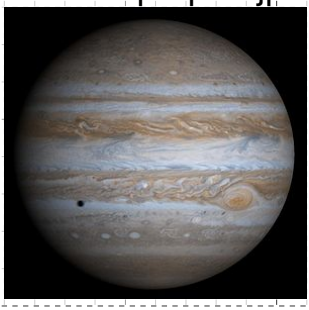

Moons

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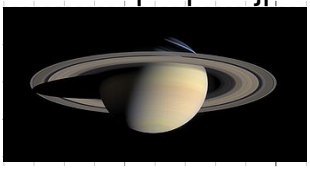

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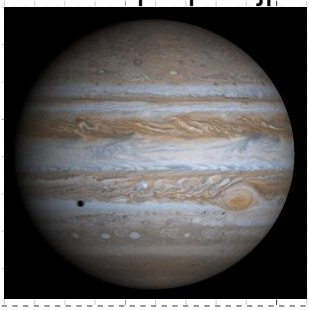

Moons

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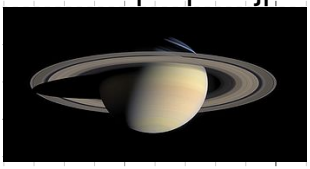
- Metis
- ...

Jupiter is the fifth planet from the Sun and the largest planet within the Solar System. It is a gas giant with mass one-thousandth that of the Sun but is two and a half times the mass of all the other planets in our Solar System combined. Jupiter is classified as a gas giant along with Saturn, Uranus and Neptune. Together, these four planets are sometimes referred to as the Jovian or outer planets. The planet was known by astronomers of ancient times, and was associated with the mythology and religious beliefs of many cultures. The Romans named the planet after the Roman god Jupiter. When viewed from Earth, Jupiter can reach an apparent magnitude of −2.94, making it on average the third-brightest object in the night sky after the Moon and Venus. (Mars can briefly match Jupiter's brightness at certain points in its orbit.)

Saturn

URL: http://pds.jpl.nasa.gov/planets/special/saturn.htm



Moons

- Titan
- Rhea
- Iapetus
- Dione
- Tethys
- Enceladus
- Mimas
- ...

Saturn is the sixth planet from the Sun and the second largest planet in the Solar System, after Jupiter. Named after the Roman god Saturn, its astronomical symbol () represents the god's sickle. Saturn is a gas giant with an average radius about nine times that of Earth. While only one-eighth the average density of Earth, with its larger volume Saturn is just over 95 times as massive as Earth. Saturn's interior is probably composed of a core of iron, nickel and rock (silicon and oxygen compounds), surrounded by a deep layer of metallic hydrogen, an intermediate layer of liquid hydrogen and liquid helium and an outer gaseous layer. The planet exhibits a pale yellow hue due to ammonia crystals in its upper atmosphere. Electrical current within the metallic hydrogen layer is thought to give rise to Saturn's planetary magnetic field, which is slightly weaker than Earth's and around one-twentieth the strength of Jupiter's. The outer atmosphere is generally bland and lacking in contrast, although long-lived features can appear. Wind speeds on Saturn can reach 1,800 km/h (1,100 mph), faster than on Jupiter, but not as fast as those on Neptune.

Uranus

URL: http://pds.jpl.nasa.gov/planets/special/uranus.htm

Moons

- Titania
- Oberon
- Ariel
- Umbriel
- Miranda
- ...

Uranus is the seventh planet from the Sun. It has the third-largest planetary radius and fourth-largest planetary mass in the Solar System. It is named after the ancient Greek deity of the sky Uranus (Ancient Greek: Ορανς), the father of Cronus (Saturn) and grandfather of Zeus (Jupiter). Though it is visible to the naked eye like the five classical planets, it was never recognized as a planet by ancient observers because of its dimness and slow orbit. Sir William Herschel announced its discovery on March 13, 1781, expanding the known boundaries of the Solar System for the first time in modern history. Uranus was also the first planet discovered with a telescope.

Neptune

URL: http://pds.jpl.nasa.gov/planets/special/neptune.htm

Moons

- Triton
- Proteus
- Nereid
- Naiad
- Neso
- ...

Neptune is the eighth and farthest planet from the Sun in the Solar System. It is the fourth-largest planet by diameter and the third-largest by mass. Neptune is 17 times the mass of Earth and is somewhat more massive than its near-twin Uranus, which is 15 times the mass of Earth but not as dense. On average, Neptune orbits the Sun at a distance of 30.1 AU, approximately 30 times the Earth–Sun distance. Named for the Roman god of the sea, its astronomical symbol is , a stylized version of the god Neptune's trident. Neptune was the first planet found by mathematical prediction rather than by empirical observation. Unexpected changes in the orbit of Uranus led Alexis Bouvard to deduce that its orbit was subject to gravitational perturbation by an unknown planet. Neptune was subsequently observed on September 23, 1846 by Johann Galle within a degree of the position predicted by Urbain Le Verrier, and its largest moon, Triton, was discovered shortly thereafter, though none of the planet's remaining 12 moons were located telescopically until the 20th century. Neptune has been visited by only one spacecraft, Voyager 2, which flew by the planet on August 25, 1989.

Mercury

URL: http://pds.jpl.nasa.gov/planets/special/mercury.htm

Mercury is one of four terrestrial planets in the Solar System, and is a rocky body like the Earth. It is the smallest planet in the Solar System, with an equatorial radius of 2,439.7 km. Mercury is even smaller—albeit more massive—than the largest natural satellites in the Solar System, Ganymede and Titan. Mercury consists of approximately 70% metallic and 30% silicate material. Mercury's density is the second highest in the Solar System at 5.427 g/cm^3, only slightly less than Earth's density of 5.515 g/cm^3. If the effect of gravitational compression were to be factored out, the materials of which Mercury is made would be denser, with an uncompressed density of 5.3g/cm^3 versus Earth's 4.4g/cm^3. Mercury's density can be used to infer details of its inner structure. While the Earth's high density results appreciably from gravitational compression, particularly at the core, Mercury is much smaller and its inner regions are not nearly as strongly compressed. Therefore, for it to have such a high density, its core must be large and rich in iron.

Venus

URL: http://pds.jpl.nasa.gov/planets/special/venus.htm

Venus is the second planet from the Sun, orbiting it every 224.7 Earth days. The planet is named after the Roman goddess of love and beauty. After the Moon, it is the brightest natural object in the night sky, reaching an apparent magnitude of −4.6, bright enough to cast shadows. Because Venus is an inferior planet from Earth, it never appears to venture far from the Sun: its elongation reaches a maximum of 47.8°. Venus reaches its maximum brightness shortly before sunrise or shortly after sunset, for which reason it has been referred to by ancient cultures as the Morning Star or Evening Star. Venus is classified as a terrestrial planet and is sometimes called Earth's “sister planet” owing to their similar size, gravity, and bulk composition (Venus is both the closest planet to Earth and the planet closest in size to Earth). It is shrouded by an opaque layer of highly reflective clouds of sulfuric acid, preventing its surface from being seen from space in visible light. Venus has the densest atmosphere of the four terrestrial planets, consisting mostly of carbon dioxide. The atmospheric pressure at the planet's surface is 92 times that of Earth's. With a mean surface temperature of 735 K, Venus is by far the hottest planet in the Solar System. It has no carbon cycle to lock carbon back into rocks and surface features, nor does it seem to have any organic life to absorb it in biomass.

Earth

URL: http://pds.jpl.nasa.gov/planets/special/earth.htm

Moons

- Moon

Earth is the third planet from the Sun, and the densest and fifth-largest of the eight planets in the Solar System. It is also the largest of the Solar System's four terrestrial planets. It is sometimes referred to as the world, the Blue Planet, or by its Latin name, Terra. Earth formed approximately 4.54 billion years ago by accretion from the solar nebula, and life appeared on its surface within one billion years. The planet is home to millions of species, including humans. Earth's biosphere has significantly altered the atmosphere and other abiotic conditions on the planet, enabling the proliferation of aerobic organisms as well as the formation of the ozone layer, which together with Earth's magnetic field blocks harmful solar radiation, thus permitting formerly ocean-confined life to move safely to land. The physical properties of the Earth, as well as its geological history and orbit, have allowed life to persist. Estimates on how much longer the planet will to be able to continue to support life range from 500 million years, to as long as 2.3 billion years. Earth's crust is divided into several rigid segments, or tectonic plates, that migrate across the surface over periods of many millions of years.

Mars

URL: http://pds.jpl.nasa.gov/planets/special/mars.htm

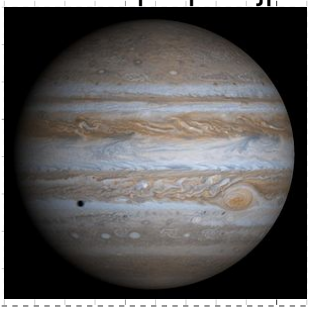
Moons

- Phobos
- Deimos

Mars is the fourth planet from the Sun and the second smallest planet in the Solar System. Named after the Roman god of war, it is often described as the “Red Planet”, as the iron oxide prevalent on its surface gives it a reddish appearance. Mars is a terrestrial planet with a thin atmosphere, having surface features reminiscent both of the impact craters of the Moon and the volcanoes, valleys, deserts, and polar ice caps of Earth. The rotational period and seasonal cycles of Mars are likewise similar to those of Earth, as is the tilt that produces the seasons. Mars is the site of Olympus Mons, the highest known mountain within the Solar System, and of Valles Marineris, one of the largest canyons. The smooth Borealis basin in the northern hemisphere covers 40% of the planet and may be a giant impact feature. Mars has two moons, Phobos and Deimos, which are small and irregularly shaped. These may be captured asteroids, similar to 5261 Eureka, a Martian trojan asteroid.

Jupiter

URL: http://pds.jpl.nasa.gov/planets/special/jupiter.htm



Moons

- Ganymede
- Callisto
- Io
- Europa
- Metis
- ...

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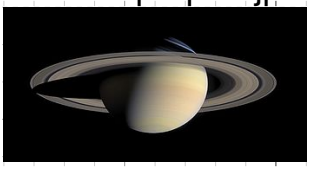

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