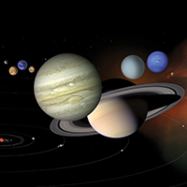

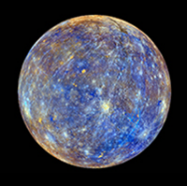
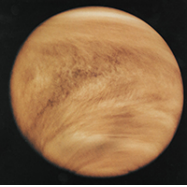





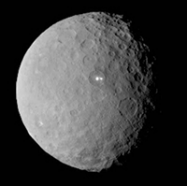


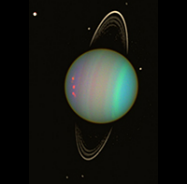
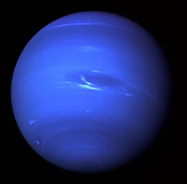


Solar System Facts and Figures (as of April 2020)


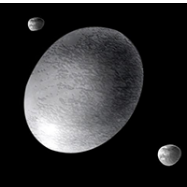

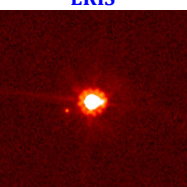
Use the following facts and figures to answer the 20+ Questions on page 4.

Solar System Objects 	Year of Discovery & Discoverer	Rotation <i>Measured in Earth days</i>	Revolution <i>Measured in Earth units</i> Distance from the Sun in AUs <i>1 AU=Earth to Sun</i>	Diameter <i>In Miles & Kilometers</i>	Temperature °F °C	Gravity <i>Compared to Earth as 1</i>	Moons & Rings
SUN  <i>Star</i>	always known	26 days	230,000,000 years to go around the core of the Milky Way Galaxy	865,000 mi 1,396,161 km	Core 27,000,000°F 15,000,000°C Surface 12,000°F 6000°C	28	8 planets 5 dwarf planets 6,619 known comets 957,757 known asteroids
MERCURY  <i>Terrestrial</i>	always known	58 days 16 hrs.	88 days 0.4 AU	3,031 mi 4,878 km	High 700°F 350°C Low -270°F - 170°C	0.38	0 Moons
VENUS  <i>Terrestrial</i>	always known	243 days	225 days 0.7 AU	7,542 mi 12,104 km	Average 900°F 480°C	0.9	0 Moons
EARTH  <i>Terrestrial</i>	always known	24 hrs.	365.25 days 1 AU	7,927 mi 12,756 km	High 130°F 58°C Low -126°F -88°C	1	1 Moon
MOON or LUNA  <i>A moon</i>	always known	27 days	27 days	2,158 mi 3,474 km	Day 260°F 127°C Night -280°F -173°C	0.17	0 Moons



Solar System Objects	Year of Discovery & Discoverer	Rotation	Revolution & Distance in AUs	Diameter	Temperature	Gravity	Moons & Rings
<p>MARS</p>  <p><i>Terrestrial</i></p>	always known	24 hrs. 37 min.	1.88 years 1.5 AU	4,197 mi 6,794 km	High 80°F 27°C Low -190°F -123°C	0.38	2 Moons
<p>CERES</p>  <p><i>Dwarf planet</i></p>	1801 by Giuseppe Piazzi	9 hrs.	4.6 years 2.8 AU	592 mi 952 km	Day -100°F -73°C Night -225°F -143°C	0.029	0 Moons
<p>JUPITER</p>  <p><i>Gas giant</i></p>	always known	9 hrs. 48 min	11.86 years 5.2 AU	88,846 mi 142,796 km	-140°F -95°C	2.5	79 Moons 1 Ring
<p>SATURN</p>  <p><i>Gas giant</i></p>	always known	10 hrs. 39 min.	29.46 years 9.5 AU	74,600 mi 120,000km	-292°F -180°C	1.065	82 Moons 7 wide rings
<p>URANUS</p>  <p><i>Gas giant</i></p>	1781 by William Herschel	16 hrs. 48 min.	84 years 19.8 AU	31,600 mi 50,800 km	-346°F -210°C	0.88	27 Moons 12 thin rings
<p>NEPTUNE</p>  <p><i>Gas giant</i></p>	1846 by Le Verrier, Gottfried, & Adams	16 hrs. 3 min.	164.8 years 30.1 AU	30,200 mi 48,600 km	-364°F -220°C	1.14	14 Moons 3 thin rings 2 wide rings



Solar System Objects	Year of Discovery & Discoverer	Rotation	Revolution & Distance in AUs	Diameter	Temperature	Gravity	Moons & Rings
<p>PLUTO</p>  <p><i>Dwarf planet</i></p>	1930 by Clyde Tombaugh	153 hrs.	248 years 39 AU	1430 mi 2,306 km	-400°F -238°C	0.06	5 Moons
<p>HAUMEA</p>  <p><i>Dwarf planet</i></p>	2004 by Brown, & Moreno	4 hrs.	285 years 43 AU	770 mi 1,242 km	-400°F -238°C	0.04	2 Moons 1 ring
<p>MAKEMAKE</p>  <p><i>Dwarf planet</i></p>	2005 by Brown, Rabinowitz, & Trujillo	22.5 hrs.	305 years 49 AU	888 mi 1,432 km	-400°F -238°C	0.05	1 Moon
<p>ERIS</p>  <p><i>Dwarf planet</i></p>	2003 by Brown, Rabinowitz, & Trujillo	25.9 hrs.	557 years 68 AU	1444 mi 2,329 km	-400°F -238°C	0.084	1 Moon

Other Solar System Objects

- Asteroids** are irregular shaped boulders ranging in size from a few hundred feet to hundreds of miles in diameter, they are generally not round. Made of rock and metal. Several groups exist:

 - **Main Belt Asteroids**—found between Mars and Jupiter
 - **Near Earth Asteroids**—asteroids near Earth and cross Earth’s orbit
 - **Trojan Asteroids**—found in the orbit of Jupiter
- Comets** are dirty ice-balls that orbit the Sun in elliptical (oval) orbits. When they near the Sun the ices sublime and melt to form a coma around the nucleus (snowball) and the pressure of sunlight pushes the coma back to form a tail of ions and dust.
- Meteoroids** are small rocks or pieces of iron that float in space ranging in size from dust particles to small rocks to small boulders. They are often the solid particles released by melting comets. When they are in space they are called meteoroids, when they enter a planet’s atmosphere and burn from friction they are called meteors, if they hit the surface of a planet or moon and survive, the remaining rock is called a meteorite.



20+ Questions to go with Solar System Facts and Figures

1. Which planet is the largest? Which planet is the smallest?
2. Which solar system object is the largest?
3. How many official dwarf planets are there?
4. How many known asteroids are there?
5. How many known moons are there?
6. Which solar system object has the shortest day?
7. Which solar system object has the longest day?
8. What does the Sun revolve around?
9. Which dwarf planet was discovered first? By whom?
10. Which planet is the hottest?
11. Why are the Pluto, Haumea, Makemake, and Eris so cold?
12. Which solar system objects have no moons?
13. What is the only moon listed?
14. How many gas giant planets are there?
15. How many terrestrial planets are there?
16. Which dwarf planet is the biggest? And which is the smallest?
17. What do terrestrial planets have that gas giant planets do not have?
18. How many solar system objects have rings?
19. Would you weigh more on Earth or Uranus?
20. Which planet has a longer day than its year?



Answers to 20+ Questions

(as of April 2020, pending new discoveries)

1. The largest planet is Jupiter and the smallest planet is Mercury. Remember, Pluto and the dwarf planets are not classified as planets.
2. The largest object in the solar system is the Sun.
3. There are 5 officially designated dwarf planets.
4. There are currently 957,757 known asteroids.
5. There are 214 known moons in the solar system, (not counting moons going around asteroids).
6. Haumea has the shortest day it's only 4 hours long!
7. Venus has the longest day, one day on Venus equals 243 days on Earth!
8. The Sun orbits around the core of the Milky Way Galaxy.
9. Ceres was the first dwarf planet to be discovered, by Piazzi in 1801.
10. Venus is the hottest planet.
11. Pluto, Haumea, Makemake, and Eris are so cold due to their great distance from the Sun.
12. Mercury, Venus, Ceres have no moons. The Sun has planets, not moons, and Luna, the Moon, doesn't have any moons either. We have yet to find a moon with a moon.
13. Luna, the Moon, the only natural satellite of Earth.
14. There are four gas giant planets, Jupiter, Saturn, Uranus, and Neptune.
15. There are four terrestrial planets, Mercury, Venus, Earth, and Mars.
16. Current NASA estimates place Eris at 1444 miles (2,329 km) in diameter while Pluto comes in a close second at 1430 miles (2,306 km), that's only a 14 miles difference! Essentially they are almost exactly the same size. The smallest dwarf planet is Ceres with a diameter of 592 miles (952 km).
17. Terrestrial planets have a solid surface, while gas giants do not.
18. There are four planets with rings, Jupiter, Saturn, Uranus, and Neptune. One dwarf planet, Haumea has a ring. The asteroid Chariklo also has a ring.
19. You would weigh more on Earth than Uranus.
20. Venus has a day that is 243 Earth days long, while its year is only 225 Earth days long.