



















What is the nearest star to Earth?

- a. Sirius
- b. The Sun
- c. Venus
- d. Alpha Centauri



b.

The Sun, at the centre of the Solar System, is a star. The stars you see in the night sky are like the Sun but much further away.

Some planets look like stars, because they reflect light from the Sun. Venus is sometimes called the evening star, but it's a planet. The second nearest star, Alpha Centauri, is actually a cluster of three stars.



How many moons orbit Jupiter?

- а. ́
- b. 3
- c. 50
- d. 0



c.

Jupiter has at least 50 moons with possibly another 17 yet to be confirmed.

Ganymede is the largest of Jupiter's moons, bigger even than the planet Mercury. Others include Callisto, Io and Europa.



How many days does the Moon take to go around Earth?

- a. 1 day
- b. 365 days
- c. 29½ days



c.

The Moon takes 29½ days (a month) to go around Earth.

A Moon day (time it takes to spin on its axis) is the same, so it always shows the same face towards Earth.

Q.

How long does it take for Earth to complete one orbit of the Sun?

- a. 365 days
- b. 30 days
- c. 422 days



a.

Earth's orbit of the sun takes a little more than 365 days, or 1 year. To make up for the little more it takes, an extra day is added to February every fourth year. Years with 366 days are called leap years.



Which of the following is *not* found in our Solar System?

- a. asteroid
- b. comet
- c. star
- d. black hole



d.

The Solar System contains the Sun (which is a star) and objects that orbit it. There are no black holes in the Solar system.

Black holes are sometimes formed when very large stars die. The star in our Solar System (the Sun) is still shining brightly!



Which planet has the hottest surface temperature?

- a. Earth
- b. Mars
- c. Mercury
- d. Venus



d.

Venus has the hottest surface temperature.

All the heat that planets receive comes from the Sun. Mercury is closest to the Sun, but it has very little atmosphere to retain heat. Venus is next closest to the Sun. Its thick atmosphere traps the Sun's heat and makes it extremely hot (462°C).



What is a shooting star?

- a. a star shooting through space
- b. an explosion in space
- c. Rocky debris from meteors burning up in Earth's atmosphere



c.

If a meteor doesn't completely burn up in the atmosphere, and lands on Earth, it is called a meteorite.

Meteor showers happen when Earth passes through debris left over from a comet orbiting the Sun.



Which of the following has never had a volcano?

- a. Earth
- b. Moon
- c. lo (one of Jupiter's moons)
- d. Jupiter
- e. Mars



d.

Jupiter is a gas planet with no hard surface. Many rocky moons and planets have volcanoes, or show evidence of volcanoes in the past.



The Solar System is part of a galaxy.

True or false?



True

The Solar System is part of the Milky Way galaxy, which contains billions of stars. The Milky Way is one of billions of galaxies in the universe.



Earth is said to be in the Goldilocks zone. What does this mean? Is it:

- a. sleeping in someone else's bed
- b. just right for life to develop
- c. helping itself to someone else's food



b.

Earth is a distance from the Sun that makes it just right for life. Like the three bears' porridge, Earth is not too hot or too cold. It's just right!



How many Earth years does the planet Neptune take to travel around the Sun?

- a. 6 years
- b. half a year
- c. 165 years
- l. 331 years



c.

Neptune takes 165 years to travel around the Sun

Neptune is an ice giant planet with rings (like Saturn) and moons. Neptune is unusual as it's tipped on its side, so it rolls around the Sun instead of spinning like other planets. It is 30 times further from the Sun than Earth.

Q.

What is the name of the largest gap in Saturn's rings?

- a. Casandra
- b. Versace
- c. Cassini
- d. Discovery



c.

The largest gap in Saturn's rings is called the Cassini Division.

The probe orbiting Saturn is called Cassini-Huygens after two astronomers who discovered some of Saturn's moons.

Giovanni Cassini also discovered the gap in Saturn's rings.

Q.

What are many of the planet names derived from?

- a. Roman gods
- b. Greek gods
- c. Norse gods



a.

The Roman gods included Jupiter, Neptune, Mars, Venus, Mercury and Saturn.

Mythology from other places has been used to name moons and other space objects in the Solar System.

Q.

How many major planets are there in the Solar System?



8.

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

Pluto used to be considered a planet but is now considered one of several dwarf planets in the asteroid and Kuiper belts.

There is ice at the poles of Mars.

True or false?



True.

Scientists believe liquid water once flowed on Mars, but only ice is found there now. If there is any life on Mars it would probably be below the surface.

Q.

What causes a lunar eclipse? (an eclipse of the Moon)

- a. The Moon is exactly lined up between Earth and Sun
- b. The Earth is exactly lined up between Moon and Sun
- Sun, Moon and Earth form a right angle



b.

Moon, Earth and Sun are exactly lined up with Moon and Sun on opposite sides of the Earth.

The Moon passes into the shadow of the Earth.

Q.

How many moons does Mars have?

- a. none
- b. 1 c. 2
- d. more than 50



c.

Mars' two moons are called Phobos and Deimos. In Greek mythology Phobos and Deimos accompanied their father, Ares the God of war. In Roman mythology Mars is the god of war. 0.

What happens during a total solar eclipse?

- a. The Sun is blocked out as the moon passes directly in front of it.
- b. The Sun gets brighter.
- c. The Sun turns red.



a.

The Moon passes directly in front of the Sun. Gradually the Sun is blocked out, then reappears.

An exact line up of the three bodies happens every couple of years, but the eclipse is only visible from certain places on Earth. Partial eclipses, when the Moon doesn't completely block the Sun are more common.



What does the phase of the Moon called 'new moon' look like?

- a. The Moon is round and fully lit.
- b. The Moon is not visible.
- c. The Moon is a semicircle



b.

A new moon occurs when it's on the same side of the Earth as the Sun. So the Sun is shining on the side of the Moon we can't see and the Moon appears dark to us.

A full moon occurs when the Moon is on the opposite side of Earth to the Sun, so we see the fully lit side of the Moon.



Where is the asteroid belt?

- a. between Jupiter and Saturn
- b. between Neptune and Uranus
- c. between Venus and Earth
- d. between Mars and Jupiter



d.

The asteroid belt is between Mars and Jupiter.

The largest object in the asteroid belt is the dwarf planet called Ceres, which is 950 km across. The smallest asteroids in the belt are dust particles.

Q.

How long does Mars take to orbit the

- a. 365 days
- b. 88 days
- c. 687 days



C

A year on Mars lasts 687 days. A Mars day is slightly longer than an Earth day: 24 hours and 39 minutes.

0.

Which of these planets has a day longer than its year?

- a. Venus
- b. Mercury
- c. Earth
- d. Saturn



a.

A day on a planet is the time taken for it to spin once on its axis. A year is the time taken for it to make a complete orbit of the Sun.

Venus is the planet that spins on its axis the slowest. Its day is 243 Earth days long: longer than its year of 225 Earth days. 0.

How fast does Earth move in its orbit around the Sun?

- a. 30 km per hour
- b. 30 km per minute
- c. 30 km per second



c.

30 km per second

Which planet has the shortest day

- a. Earth
- b. Mercury
- c. Jupiter
- d. Neptune



C

Despite being the largest planet Jupiter has the shortest day: less than 10 Earth hours.

Q.

Which is the second largest planet in the Solar System?



Saturn

Jupiter is the largest planet; Saturn the next largest. Both are classified as gas giants as they are made mainly of hydrogen and helium. Q.

What object in the Solar System has the largest mass?



Sun

The Sun contains about 99.9% of the mass of the Solar System.