



ROYAL
OBSERVATORY
GREENWICH

Sun

Solar System

Holiday



Solar System Holiday



Sun

Our Sun is the only star in our Solar System but it is one of billions in our Milky Way galaxy! It is different to everything else in our Solar System because it is the only object that gives out light; all of the planets, moons, asteroids, comets and dwarf planets only reflect light. If the Sun disappeared it would be night time all the time.

The Sun is the hottest thing in our Solar System. At what is sometimes called the "surface" of the Sun, the temperature is 5,500°C. If you want to reach the hottest part of the Sun, you'd need to go right to the core which is right in the middle of the Sun.

The temperature here is 15 million °C — yikes. This is also where the Sun makes its light. Even though some photographs give the impression that the Sun is made up of fire and lava, it's actually made up of very hot gas. In fact, fire and lava are much, much cooler than the Sun!

There is nothing as big as the Sun in our Solar System by a long way. You could very comfortably fit more than a million Earths inside our star! However, when you compare the Sun with other stars it's actually a medium-sized star. Astronomers have found many stars that are so big you can fit millions of Sun-sized stars in them!

Type of object	Star
How many Earths can you fit inside it?	1,304,000
Number of moons	—
What is it made of?	Gas
Main colour	Yellow
How long is a year?	—
How long is a day?	—
Does it have seasons?	—
Minimum temperature (°C)	5,500 (at surface)
Maximum temperature (°C)	15 million (at centre)