# The Sun





#### Appearance

The sun appears to be yellow, orange or even red but really, the sun is all colours of the rainbow. The reason we only see red, orange and yellow is because all the other colours are short wavelength colours. Red is a long wavelength colour because on a rainbow it is the longest colour. Blue is a short wavelength colour, and can't make it through the atmosphere.



The sun is a yellow dwarf star, and is much bigger than earth. But really, the sun is actually quite small compared to the other stars. The radius of the sun is 696,340 km. The temperature of the sun is around 5500 degrees Celsius.



GOES-16 SUVI 304Å

GOES-16 SUVI 94Å

GOES-16 SUVI 131Å

### Composition

The sun makes up around 99.86% of the solar system's mass. The sun is 74% hydrogen and 24% helium.the sun has 6 layers,

1:The solar interior.

2:The radiative zone.

3:The connective zone.

4:The photosphere.

5:The cromosphere.

6:The Corona.



#### **Function**

The sun gives life to everything on earth. The plants, animals, humans and even gives us power through the use of solar panels. The light from the sun feeds our crops and our trees. That light takes only 8 and a half minutes, which is quick considering that the earth is 151.17 million km away from the sun.



The sun holds everything in the solar system. Without it we would freeze over and die. If the sun magically disappeared, the earth would again, freeze over and as it orbits the sun, it would get thrown into space and maybe crash into another planet.

### The Sun's Life

The sun and the solar system all started as a big cloud in space. Something happened which we don't really know, that caused a gravitational collapse in the centre of the cloud. The collapse caused the dust and gas pockets in the cloud to collect denser regions which pulled in matter. Because of all the matter being pulled in, everything began to spin which caused it to heat up which made a material ball to form in the centre. The rest of the cloud became a flattened ring. The material ball is later going to become the sun, and the disc will be the planets. The material ball spent the next 100,000 years as a collapsing proto star. The star then became a T-Tauri star and a million years later became the sun.



#### Fun facts

Although you might not think it the sun actually has 3 moons.

You could fit over a million earths inside the sun.

The sun's surface area is around 11,990 times the size of earth's.

## I hope you enjoyed :)

