

Sun's Love Song

Words and Music by Mary Amato

THE SONG

F Am
There you are
F Am
Spinning in the dark
F Am Gm C7/C
I am ninety three million miles away
F Am
By the time my light
F Am
Travels to your eyes
F Am Gm C7
Minutes pass. What you see has already
played.

CHORUS

A7 Dm
The little light of mine
A7 Dm
I've got to let it shine
A7 Dm
The turn of forces pulls so tightly in me
Gm Gm7b5
Oh, I burn and burn and burn

VERSE

F Am
You draw pictures of me
F Am
Crave my touch upon your skin
F Am
It's your conscious love for me
Gm C7/C
that makes my name
F Am
At a greater distance
F Am
You wouldn't feel my warmth.
F Am
You'd see me like the others
Gm C7
I'd have no special claim.

REPEAT CHORUS

THE SCIENCE

Imagine the sun looking at us, a tiny planet that is ninety-three million miles away. Hard to imagine that distance? It's the same as walking around the circumference of the earth 3,720 times.

Light travels at a speed of 186,000 mi/sec., which means that when something is far away, we are really seeing it in the past. Let's say you have a friend on a planet that is 93 million miles away, and he or she can see you through a telescope (no telescope exists like that). You wave at your friend for a few seconds and then you go for a long bike ride. By the time your friend sees you wave, you are actually already riding your bike. That's because it takes light approximately 8.2 minutes to travel 93 million miles. So when you look up at the sun, you are actually looking at the sun that existed 8.2 minutes in the past.

The sun is a massive star, mostly made of hydrogen and helium. The light and heat it gives off are the effects of a reaction called nuclear fusion. People say the sun burns, but that's a figure of speech. In the sun's core, hydrogen converts into helium. Light particles called photons carry the energy out from the core. This energy heats up other materials in the sun. Gradually the boiling gasses transfer the photons all the way to the surface, finally radiating out into space as light and heat.

The sun seems special to us, but it is just like any other star. All stars are simply enormous masses of exploding gas. However, most stars – the itty bitty, teeny tiny ones that you can only see at night – actually aren't necessarily smaller than our sun. They are just millions more miles away from our solar system than our sun, so they appear much smaller. Our sun is the only star close enough (and large enough) to provide heat and warmth to our planet.

BRIDGE

Dm Ddim
 You only see a sliver of the colors I send out
 Gm
 Hold a prism to me and
 C7 C
 paint your world with my heart

VERSE

F Am
 We don't talk about it
 F Am
 I know you're afraid
 F Am Gm C7/C
 I might use up everything I've got to give
 F Am
 All your fears are valid
 F Am
 Every fire has its end
 F Am
 So right now you dance with me
 Gm C7
 and sing and laugh and live.

END CHORUS

A7 Dm
 The little light of mine
 A7 Dm
 I've got to let it shine
 A7 Dm
 The turn of forces pulls so tightly in me
 Gm Gm7b5
 Oh, I burn and burn and burn and burn
 F/Am/Gm7b5/F6
 Through time.

There is an entire spectrum of waves of energy that exist in our solar system, called Electromagnetic Waves. These include radio waves, microwaves, infrared, ultraviolet, x-ray radiation, gamma ray radiation waves, and visible light waves. Humans can only see a fraction of the spectrum called visible light waves; they come from the light that radiates from the sun and give us our rainbow of colors that we see. Animals and insects, for example, can see colors that we can't detect.

Stars eventually run out of the gas at their core that fuels their nuclear fusion. Even our sun will run out of fuel. When a star like our sun "dies," the star expands and turns into a Red Giant. It then sheds its outer layer, and becomes a very dense white dwarf, which eventually becomes invisible. However, this process takes millions, if not billions, of years.