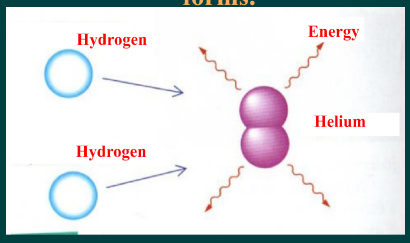
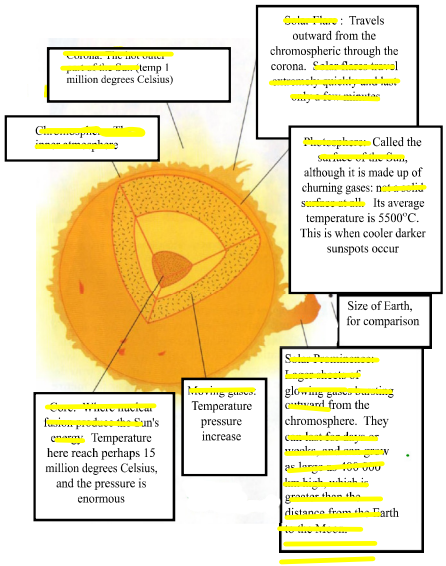
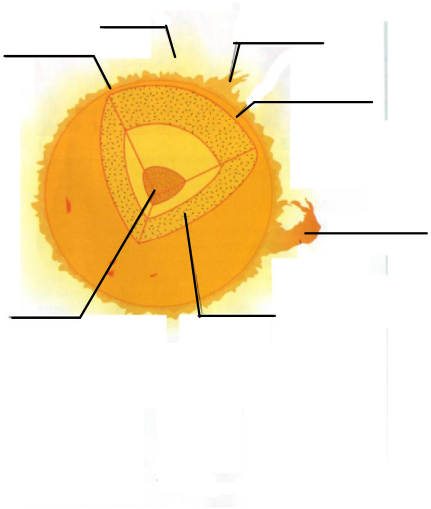
The Sun: An Important Star

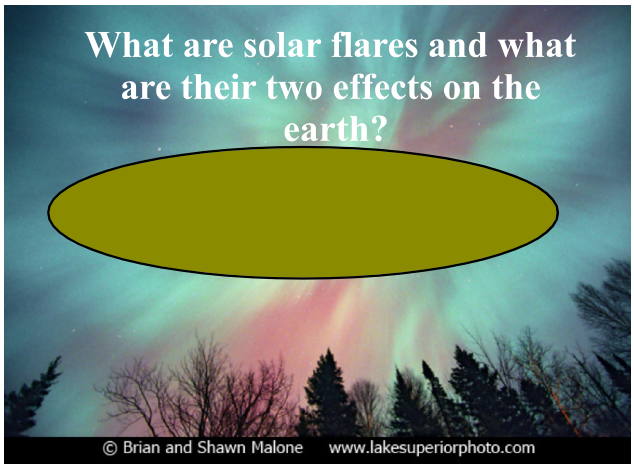
- closest star
- brightest object in the sky
- The sun has been producing energy for about 5 billion years already, and they predict that it will produce energy for another 5 billion years before it runs out of fuel.

The Sun produces energy by a process called nuclear fusion. In the Sun's core, there is so much pressure and temperature that 2 hydrogen atoms fuse together to form 1 helium atom. This process produces large amounts of energy in the form of heat, light and other forms.









https://www.youtube.com/watch?v=Ojzdz_slO8o

https://www.youtube.com/watch?v=5O-wAYKBBSc

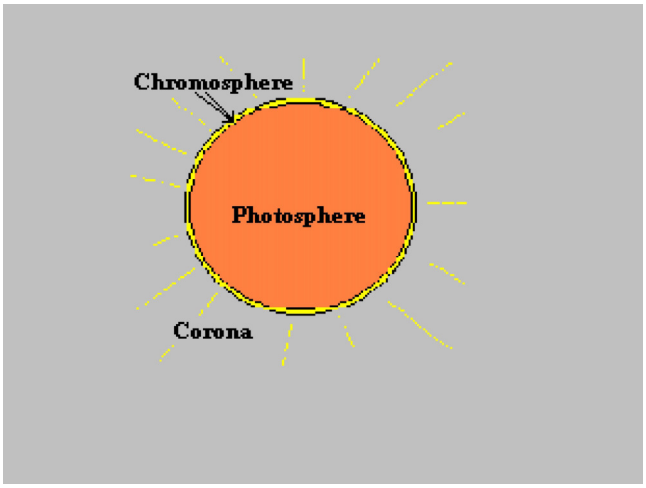
https://www.youtube.com/watch?v=Pz870WqsN78

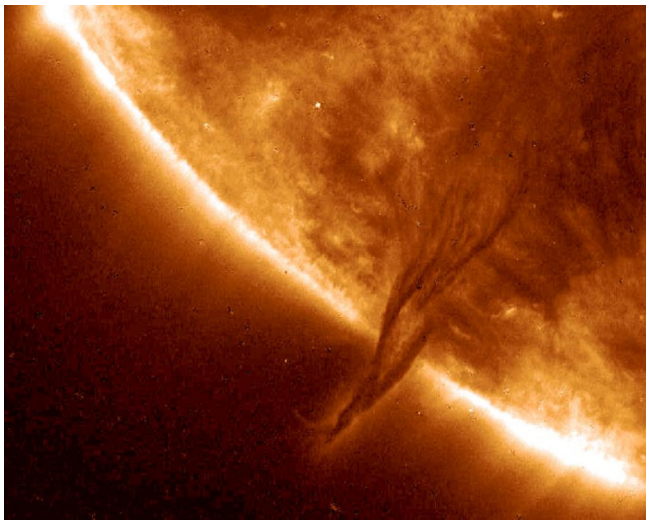
Solar flares emit charged particles , which travel more slowly than light. When they reach Earth, they are focused by Earth's magnetic field, at the north & south poles. This results in electrical effects in the atmosphere interfering with the transmission of radio waves.

The flares charged particles also produce the Aurora Borealis & Aurora Australis

http://www.youtube.com/watch?v=ogtKe7N05F0

http://www.youtube.com/watch?v=QmQrRC6lerk


Chromosphere
Photosphere
Corona



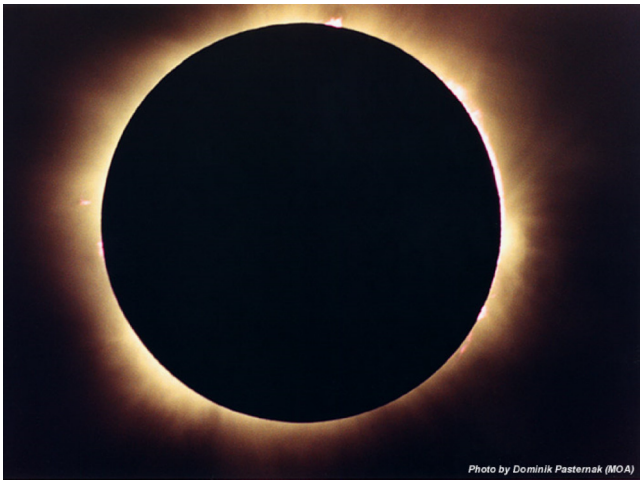


Photo by Dominik Pasternak (MOA)


http://www.youtube.com/watch?v=ZqqTiiCgyUc
Aurora