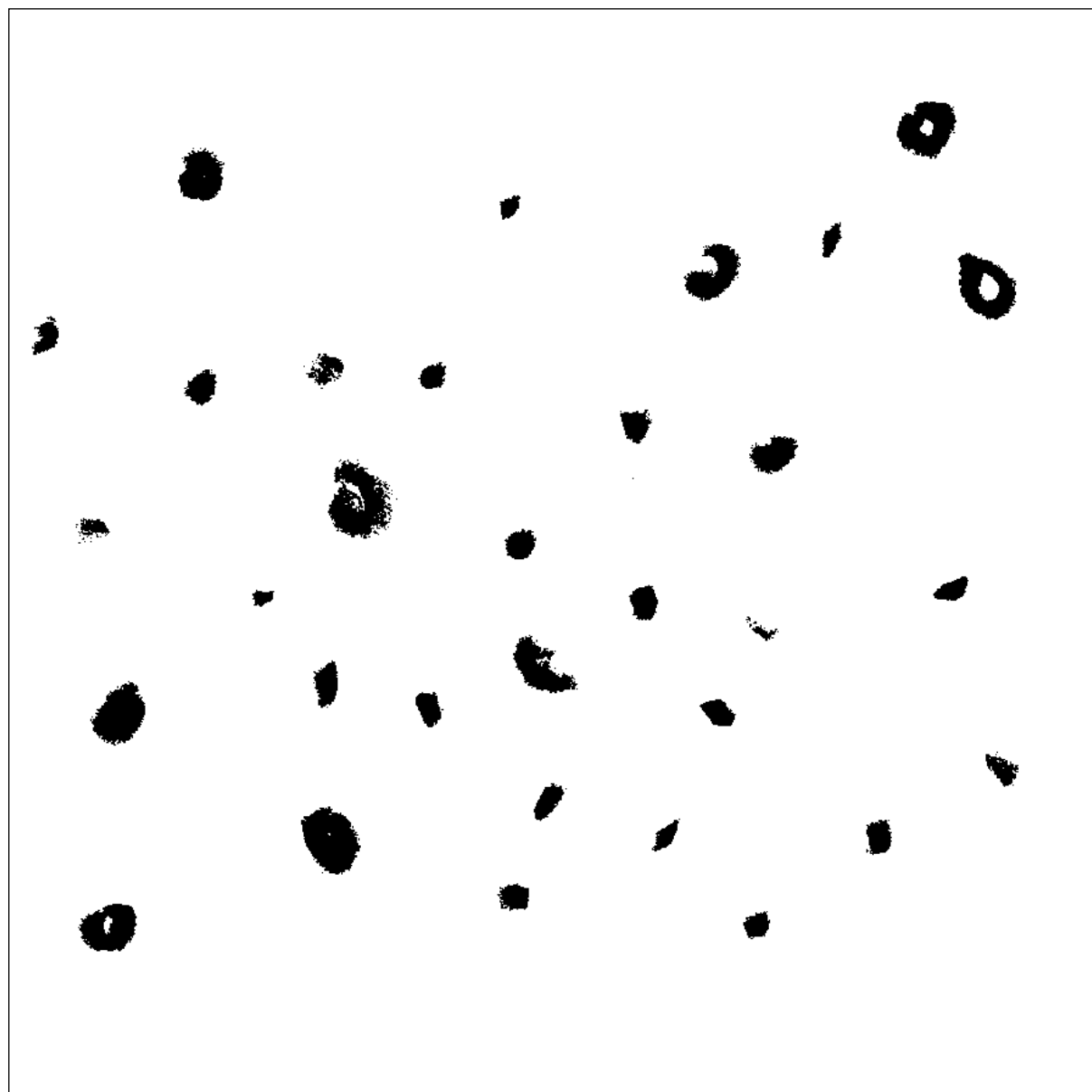


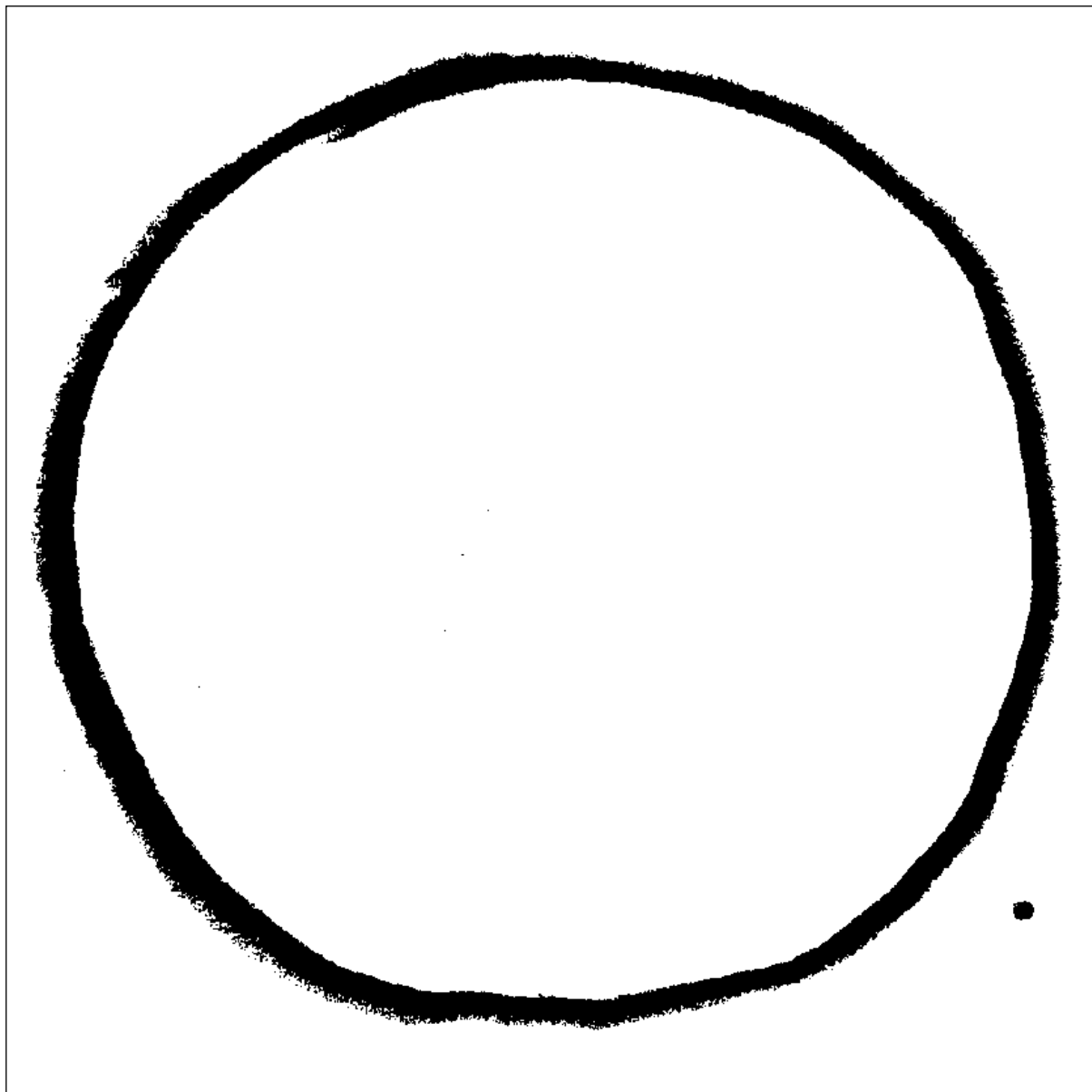


Our Very  
Own Star:  
the Sun

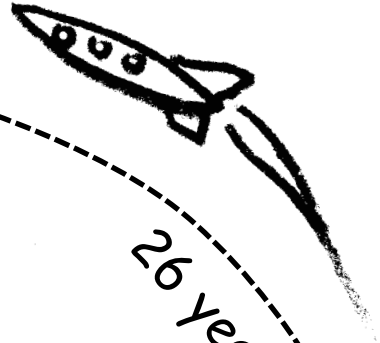
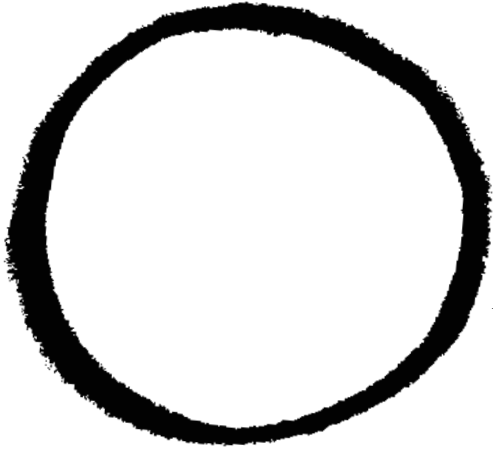


When you look at the night sky filled with stars, have you ever wondered what a star is?

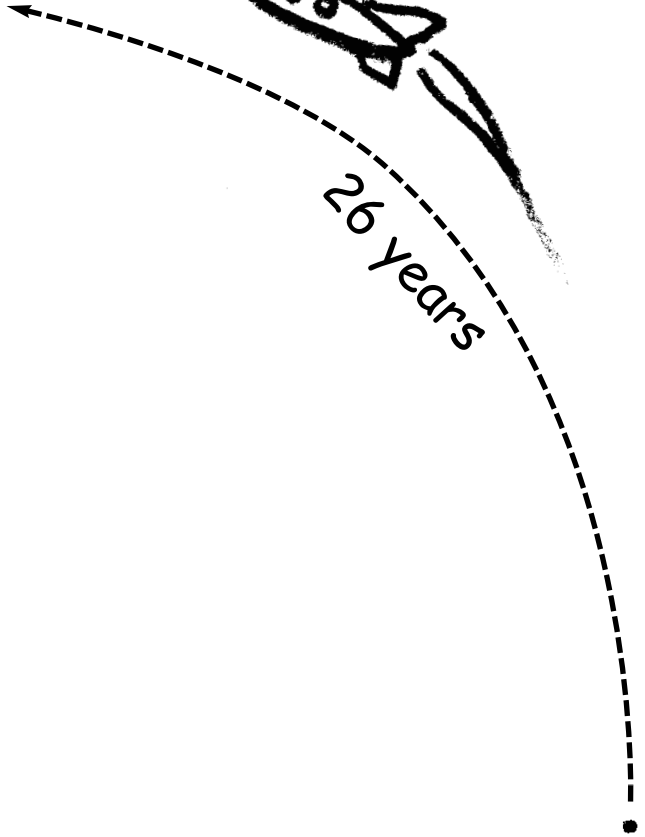
Walk outside on a clear day and say, "Hello!" to our very own star - the Sun! (But don't ever look directly at the Sun. You may damage your eyes.)



The Sun is very big! Imagine this large circle is the Sun. Then the little dot would be the size of the Earth. Of course, the Earth is not this close to the Sun.

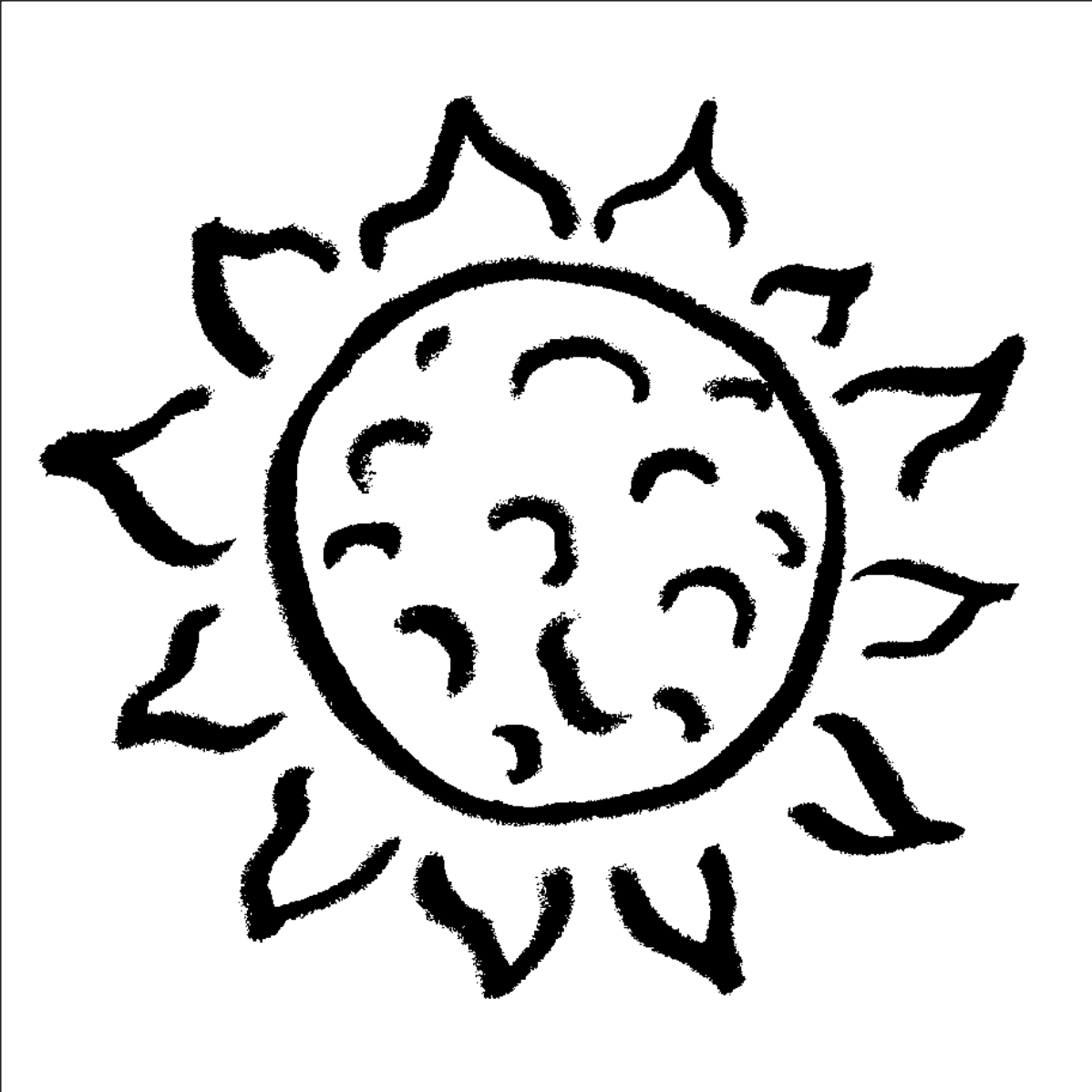


26 years



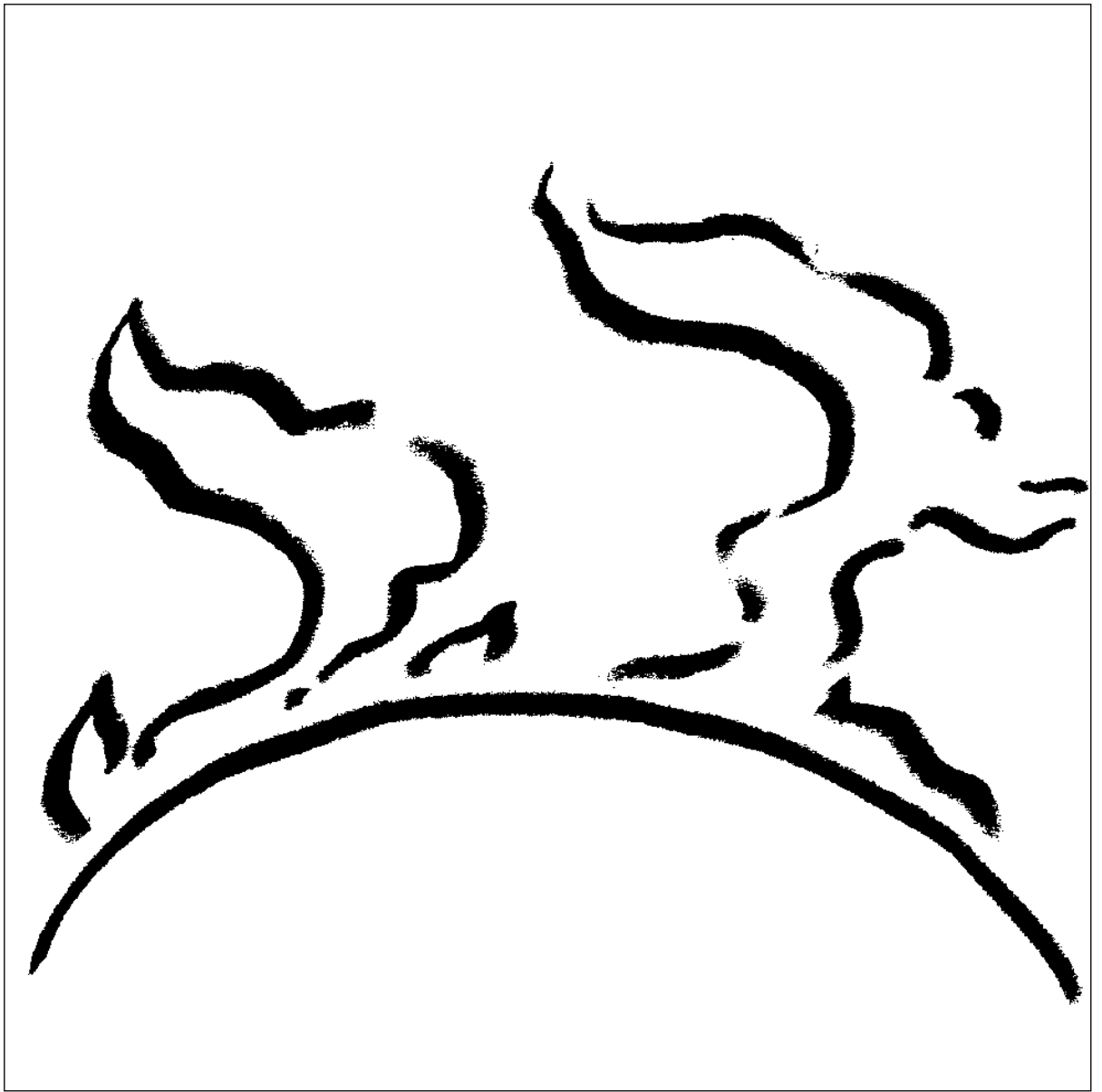
The Sun seems small when we look at it because it is very far away. The Sun is 93 million miles from Earth! If somehow you could fly an airplane to the Sun, it would take you 26 years. How old would you be when you got to the Sun? How old would you be when you got back?

What do we get from the Sun? The Sun gives us heat and light necessary for us to live. Without the Sun, the Earth would be a frozen ball of ice.





The Sun is a very big ball of hot gases. The flame of a candle is also hot gases. If you look closely at the candle, you can see brighter and darker spots in the flame. The hot gases of the Sun also show darker and lighter spots, and the gases move and flow.

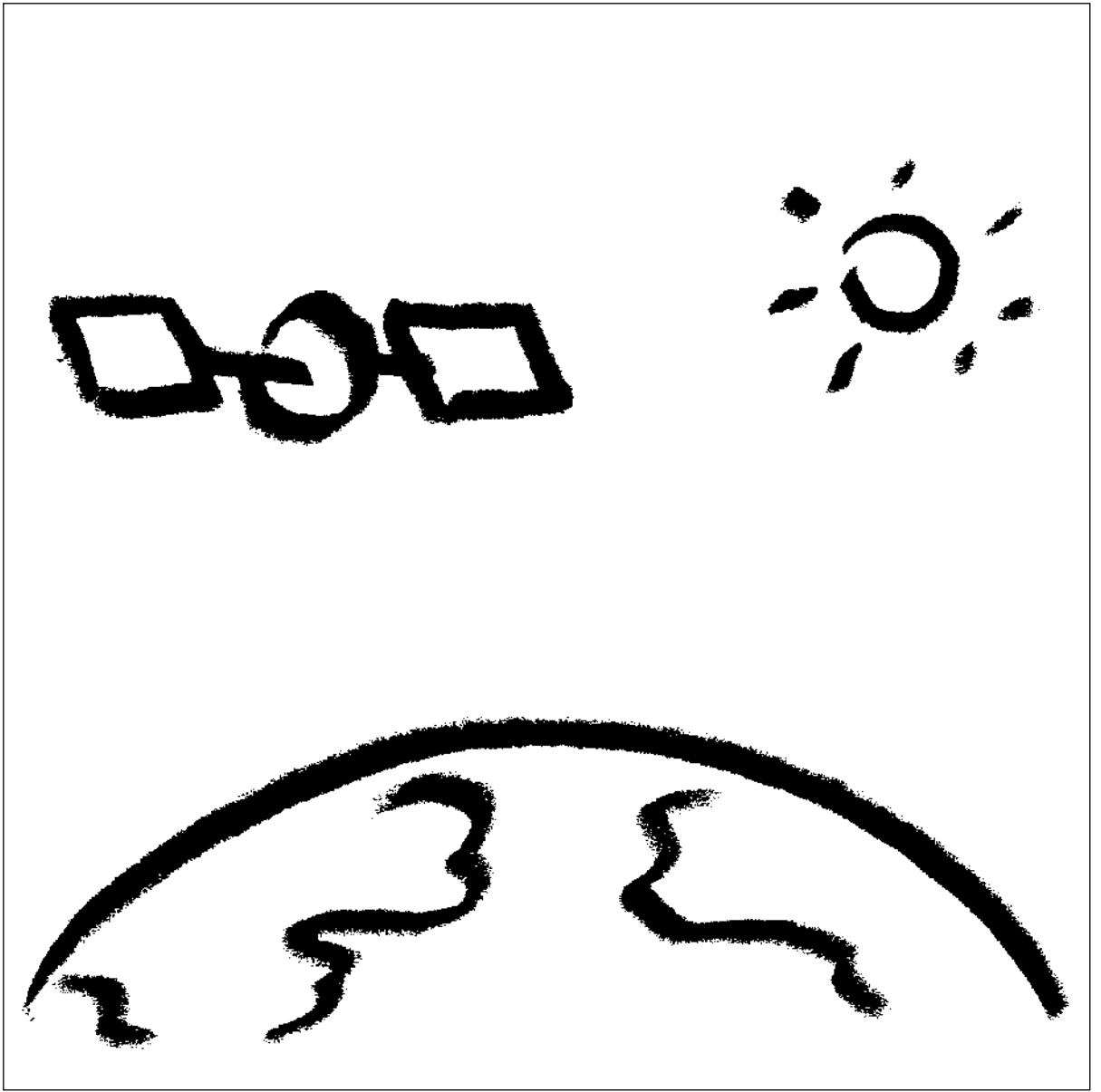


The dark spots on the Sun are large storms called sunspots. They look small on the Sun but are, in fact, as large as the Earth or bigger. Can you imagine a storm as big as the Earth?

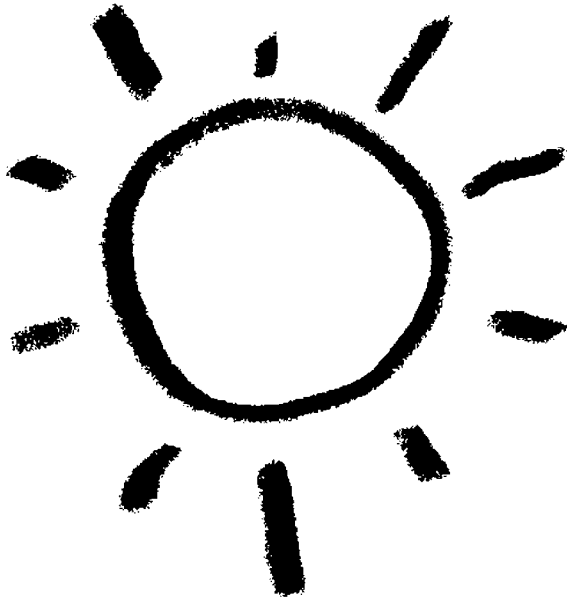
There are also huge explosions called solar flares in which the hot gases are spit away from the Sun - like spaghetti sauce that bubbles and spatters. These great storms blast material out of the Sun and into space.



Tiny particles that scientists call matter are always leaving the Sun. It is somewhat like the wind blowing. In fact, this stream of tiny particles is called solar wind. It takes one to five days for this wind to reach Earth. Sometimes the solar wind causes beautiful lights in the night sky, called auroras. These lights look like moving sheets of colors high in the sky.

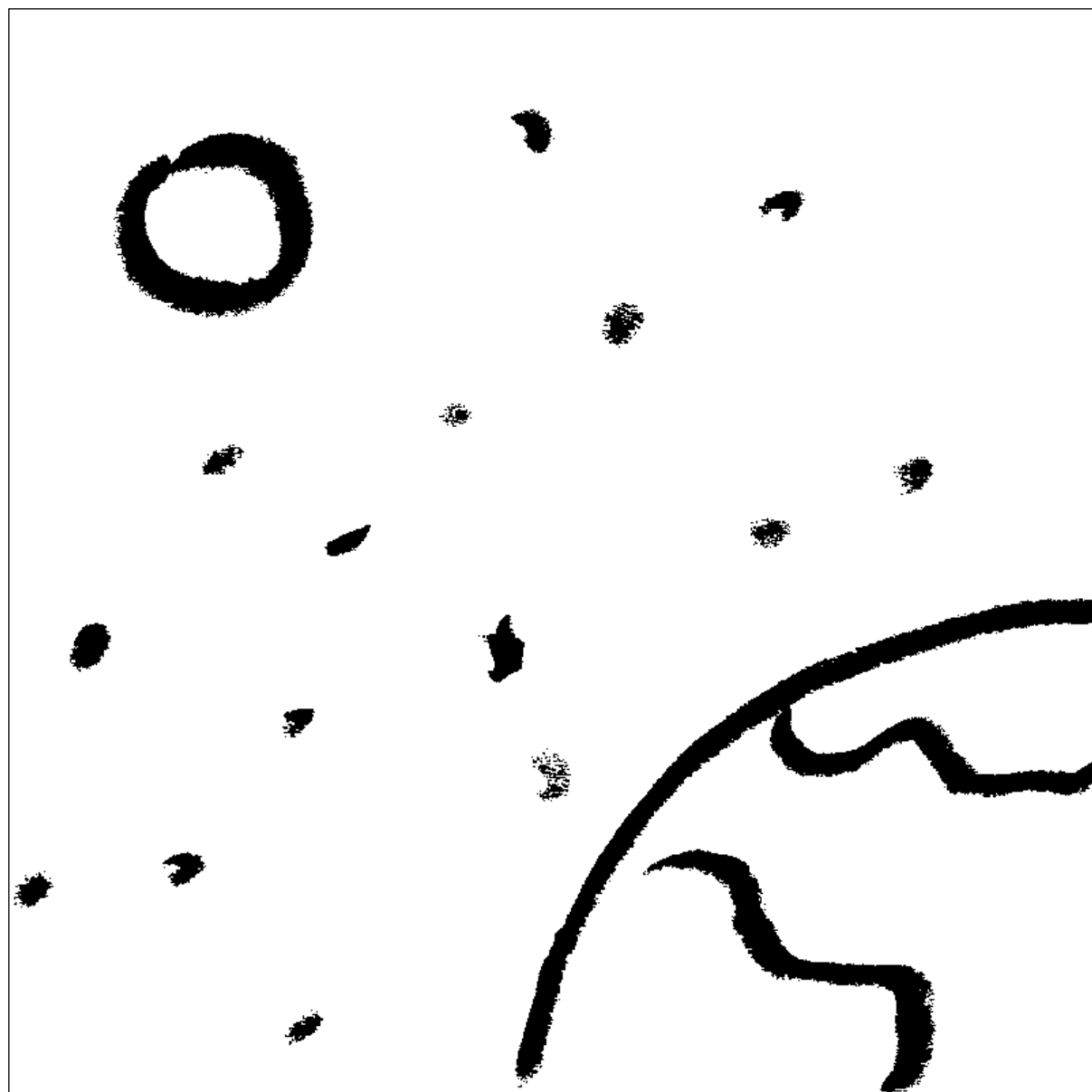


Sometimes the solar winds can disrupt electricity, telephones, televisions, and radios. This can be very dangerous for police, firefighters, airplanes, and ships at sea.





The Sun is important to us because we need its warmth and light. Scientists also study the Sun to learn more about the Earth's weather and climate. NASA helps us to learn more about the Sun by sending satellites into space to study the space weather. Perhaps one day you can work for NASA, too!



The Sun - our very own star. It lights the daytime sky and gives us warmth just as the nighttime stars give the sky a special beauty.



National Aeronautics and  
Space Administration

**Goddard Space Flight Center**  
Greenbelt, Maryland 20771

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Families, enjoy the on-line interactive  
version of "Our Very Own Star: the  
Sun" on the Solar Terrestrial Probes  
Education and Outreach homepage!  
<http://stp.gsfc.nasa.gov>

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