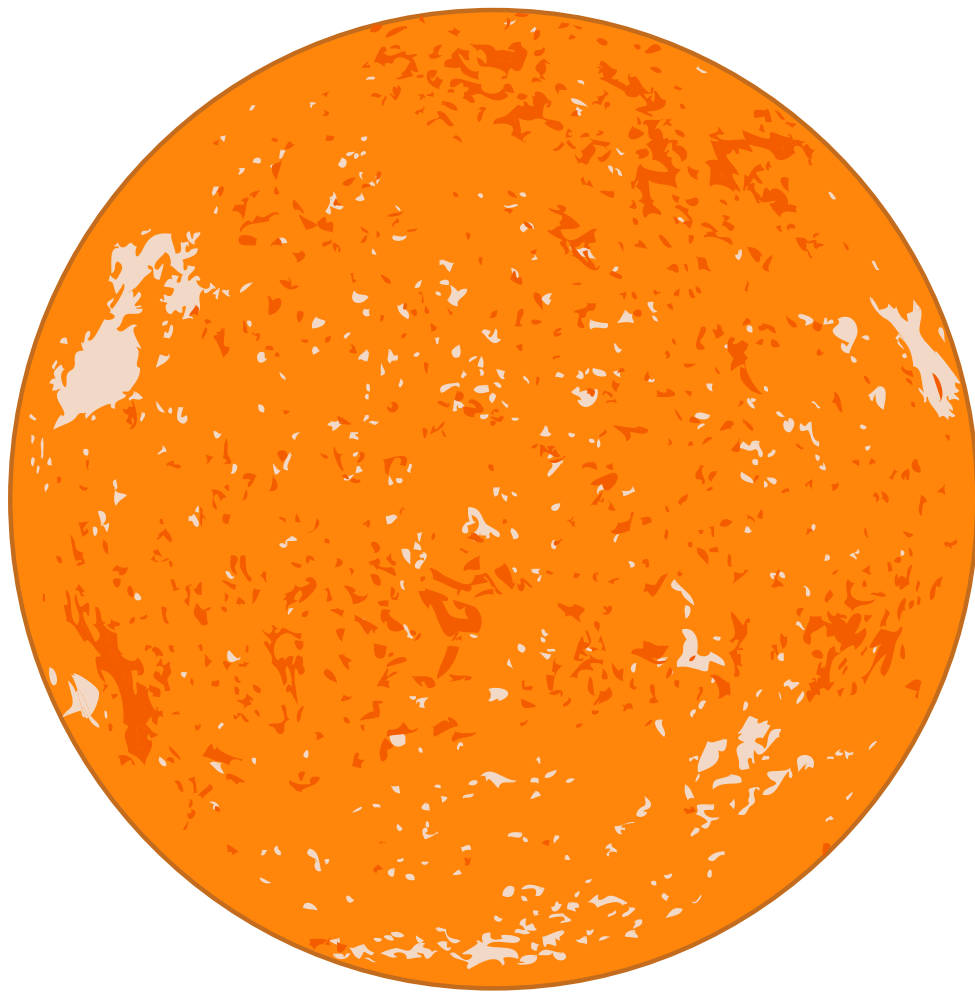


Heat and Light from the Sun

Level H/I

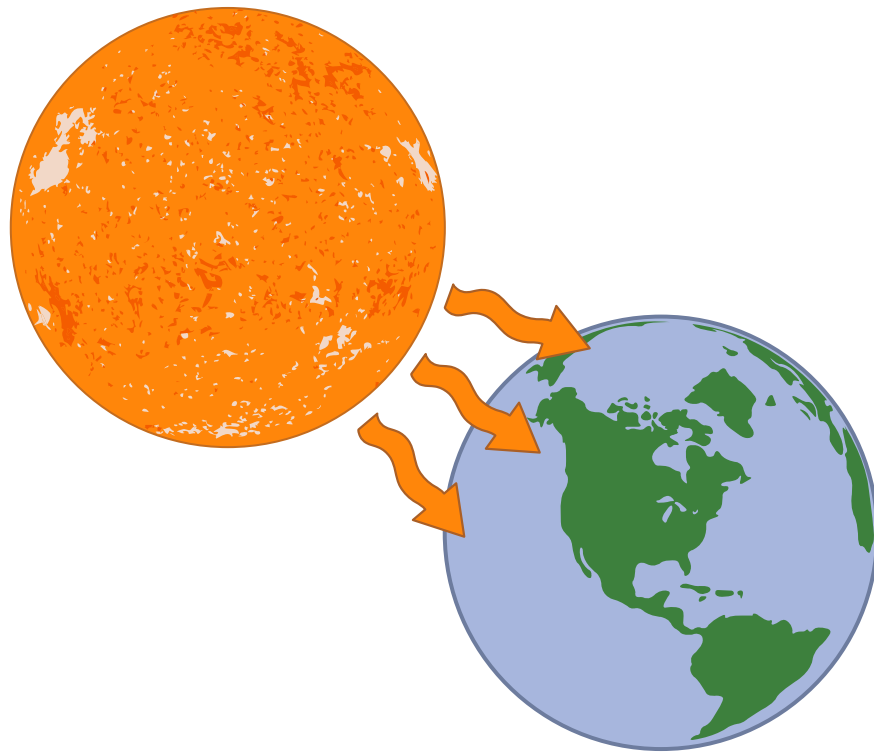


by Kathy Staugler

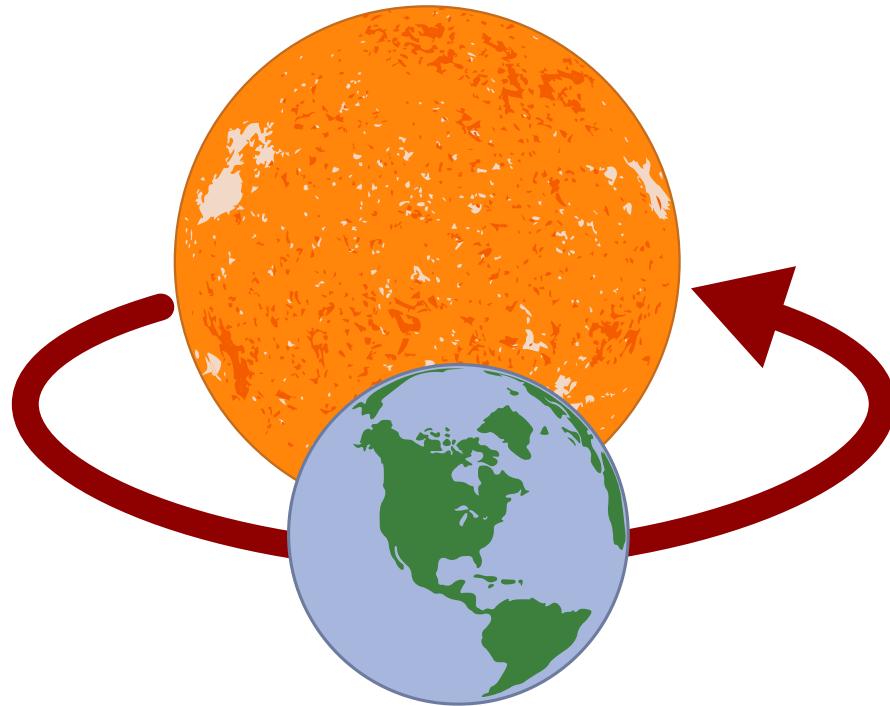
Illustrated by Travis Schaeffer



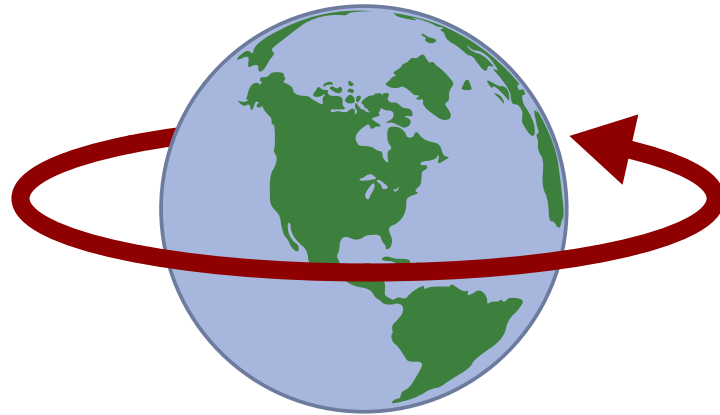
The **Sun** was born five billion years ago. Like other stars, the Sun started out as a ball of dust and gas. The dust and gas made a bigger ball. And the ball of dust and gas got hot. The center of this big star, called the core, was one million degrees. That's HOT! Now the big star is sending out heat and light.



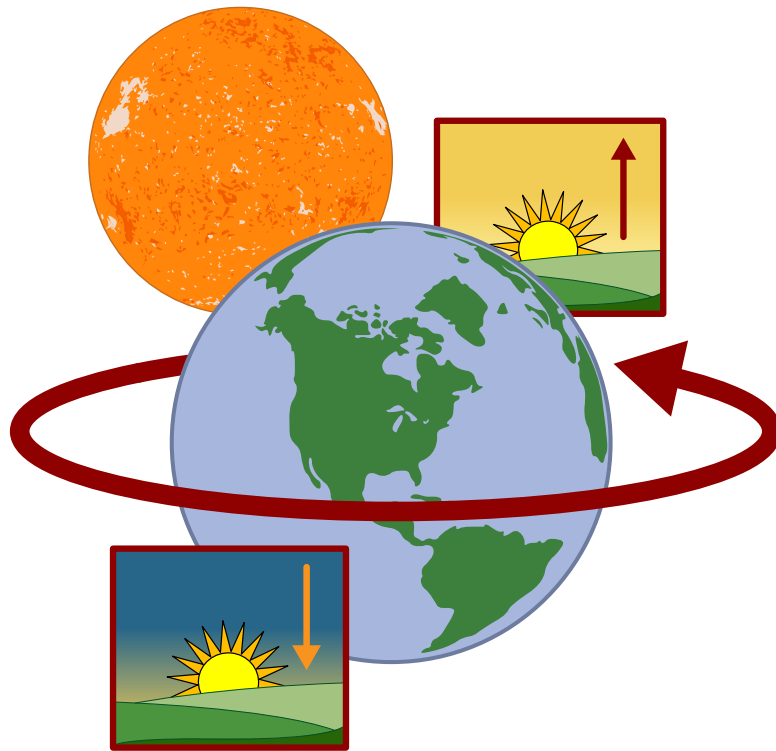
This big star sends heat and light to our **Earth**. Long ago, scientists called the big star Sol. Sol means Sun. That's why the Sun and all of the planets are called our **Solar System**. The Sun is the center of our Solar System.



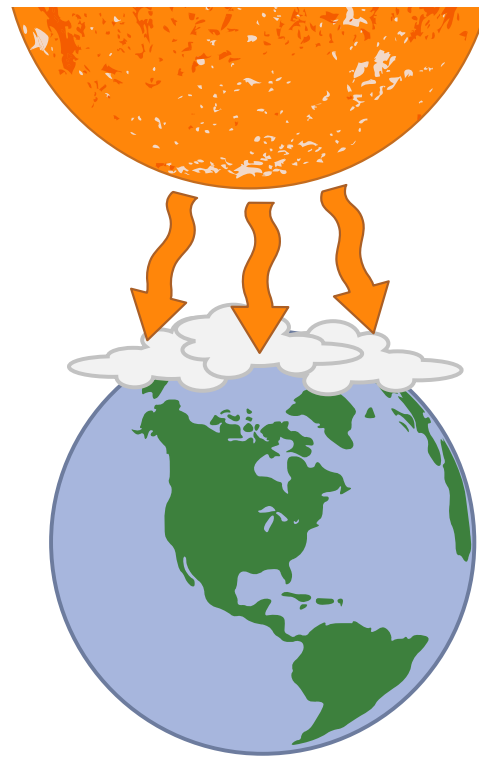
The Sun is the biggest thing in our Solar System. All of the planets, including the Earth, move around the Sun in space. It takes 365 days for the Earth to move around the Sun one time. 365 days is one **year**.



The Sun gives light to the Earth. It takes 8 minutes for the light of the sun to reach the Earth. That's called the *speed of light*. We see light from the Sun in the day. While the Earth is moving around the Sun, the Earth is also spinning around. When the Earth spins toward the Sun, we get light from the Sun.

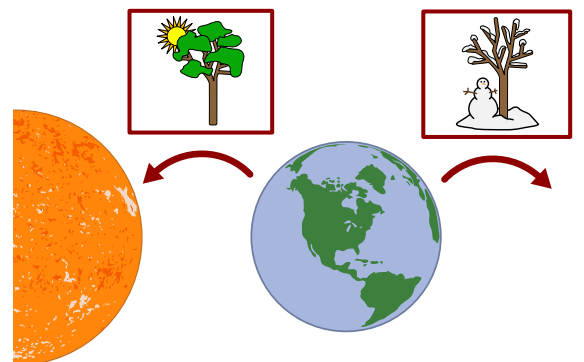


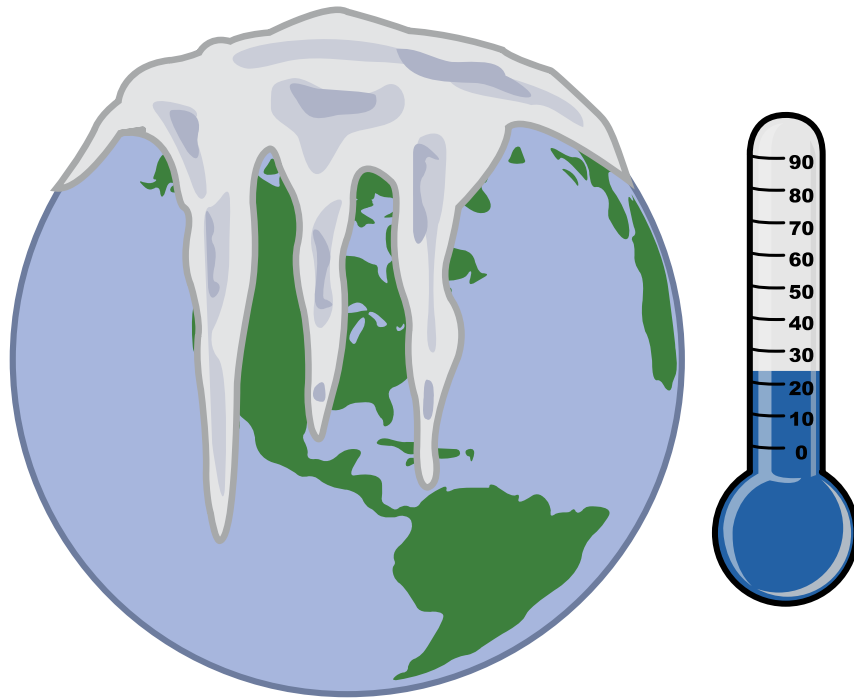
When the Earth spins away from the Sun, it is **nighttime**. We do not see the sunlight at night. But when it is night where you live, it is **daytime** somewhere else. The Sun is always out in space. The Sun is always shining.



The Sun gives heat to the Earth. It feels warm to sit out in the Sun. Some days the clouds cover the Sun. It does not feel as warm outside on a cloudy day.

When the Earth is spinning around, it is also tilted. We cannot feel the Earth spinning. We cannot feel the Earth tilted. Sometimes the Earth is tilted toward the Sun. That is **summer**. Summer is warmer because that part of the Earth is getting more energy from the Sun. When the Earth is tilted away from the Sun, it is **winter**. Winter is colder because that part of the Earth is not getting as much energy from the Sun.





The Sun is important to the Earth. If we did not have the Sun, it would always be dark. If we did not have the Sun, the Earth would be too cold to live.

Learn more: http://www.kidsastronomy.com/our_sun.htm

yes



Heat and Light from the Sun

no



<p>send</p>	<p>move around</p>	<p>big</p>	<p>Sun</p>	<p>star</p>	<p>dust / gas</p>	<p>ball</p>																																										
<p>see</p>	<p>spin</p>	<p>hot</p>	<p>center / core</p>	<p>light</p>	<p>Earth</p>	<p>planet</p>																																										
<p>toward / closer</p>	<p>away</p>	<p>cold</p>	<p>Solar System</p>	<p>space</p>	<p>year</p> <table border="1"> <tr><td colspan="7">2011</td></tr> <tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td></td><td></td></tr> <tr><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr> <tr><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td></tr> <tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td></td></tr> </table>	2011								1	2	3	4			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		<p>nighttime</p>
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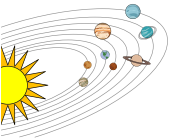
Glossary



Sun - the star in the center of our Solar System



Earth - the planet we live on



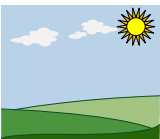
Solar System - the Sun with all the planets that spin around it



year - 365 days; the time it takes for the Earth to move around the Sun one time



nighttime - when the Earth spins away from the Sun; dark



daytime - when the Earth is facing the Sun; light



summer - a warm season when the Earth is closest to the Sun



winter - a cold season when the Earth is farthest from the Sun