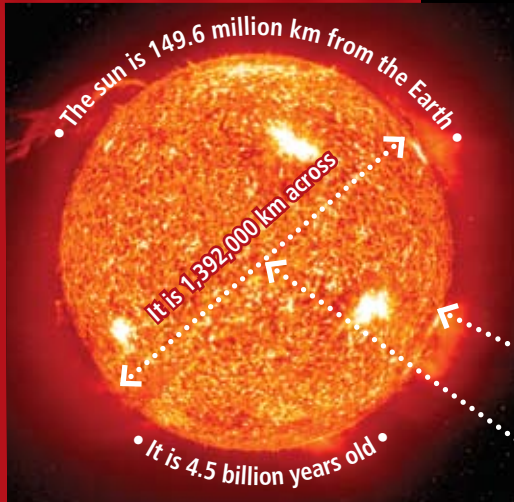


# THE SUN

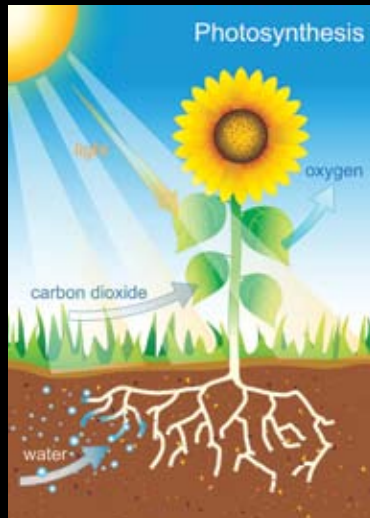
At the end of *The City of Ember*, Lina and Doon see the sun for the first time ever: 'A big red ball started to climb into the sky. It was warm and the children turned to it.'



## The life giver

The sun gives the Earth light and heat. Without the sun, there can be no life on Earth. All living things need it. Plants use the light from the sun, together with water and a gas, carbon dioxide, to make food (sugar). This is *photosynthesis*. During photosynthesis, plants also make a second gas, oxygen. All animals need oxygen.

In *Ember*, people live in the dark. There is food in the city gardens without any light from the sun. Is this possible? In our world, this is only possible with special lights.



## The sun and people

The sun is important in other ways. Ten minutes in the sun every day is very good for you. Your body needs the sun to make Vitamin\* D. Vitamin D is important for strong bones. Most people feel happier when the sun is out. Near the north and south Poles, the days can be very short. In some places – like Iceland – you can't see the sun for weeks. People in these places sometimes feel sad.

\* You find vitamins in food. They are important for our bodies.

## Hotter and hotter

We need the light and heat from the sun, but not too much. There is lots of pollution on Earth today, for example from cars and planes. Gases come from pollution. The Earth is much hotter now because these gases are keeping too much of the sun's heat. This is *global warming*, and it is one of world's biggest problems.

Some places do not have enough water. In other places, there is too much water. This is because more and more ice at the Poles is turning into water.

Why did the Builders build the city of Ember, do you think?



Utah, USA

What do these words mean? You can use a dictionary.  
gas heat Earth animal bones pollution ice