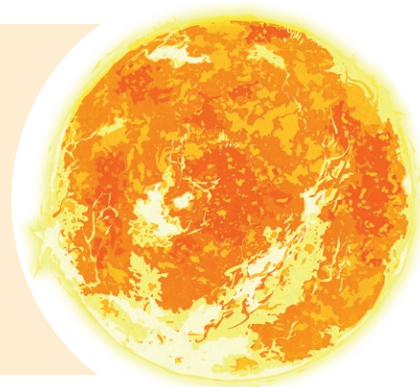


# The Sun

## The Solar System

The biggest star in the solar system is the sun. It can be found in the very centre of our solar system. The sun is thought to be about 4.5 billion years old. Planet Earth is about 150 million kilometres away from the Sun.



## Leap Year

Earth is always moving around the Sun. It takes  $365 \frac{1}{4}$  days, or one full year, for planet Earth to complete one full circle around the Sun. You can't have a  $\frac{1}{4}$  of a day! So, every four years, we add the four quarters together to make 1 full day. This is called a leap year. There are 366 days in a leap year.

## Day and Night

While Earth is moving around the Sun, it is also spinning on its own axis. It takes Earth 24 hours to complete one full spin. It is the spinning of earth that gives us day and night. During the summer we have longer days and shorter nights, but during the winter we have shorter days and longer nights. The shortest day of the year is on 21<sup>st</sup> December. The longest day of the year is on 21<sup>st</sup> June.

## Eclipse

An eclipse happens when the Moon moves in between the Earth and the Sun. This causes the sun's light to be blocked from reaching the earth for a short time.

## Dangers of the Sun

The Sun is very important for life on Earth. We need the sun for many reasons such as light, heat and food. Plants and animals also need the sun. Without the sun, we would not be able to survive. However, we must be careful because the sun can also be dangerous. Our skin can burn if we spend too much time in the sunlight. The rays from the sun can damage our eyes. We can protect ourselves from the dangers of the sun by wearing sun cream. Sunglasses can help to protect our eyes.

# Questions

1. What is the sun?  

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2. Where in the solar system can the sun be found?  

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3. How old is the sun thought to be?  

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4. How long does it take the Earth to move around the Sun?  

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5. Explain how a leap year happens.  

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6. When is the longest day of the year?  

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7. What is an eclipse?  

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8. Why is the sun important for planet earth?  

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9. In what way can the sun be dangerous?  

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10. Can you suggest some ways that we can protect ourselves from the sun?  

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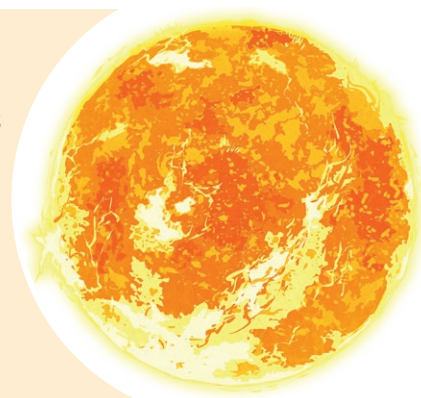
# Answers

1. What is the sun?  
**The sun is the biggest star in the solar system.**
2. Where in the solar system can the sun be found?  
**The sun can be found in the centre of the solar system.**
3. How old is the sun thought to be?  
**The sun is thought to be about 4.5 billion years old.**
4. How long does it take the Earth to move around the Sun?  
**It takes the Earth one year to move around the Sun.**
5. Explain how a leap year happens.  
**It takes the Earth  $365 \frac{1}{4}$  days to move around the sun. Every four years the quarters are added together to make one full day. When the day is added to a year, it is called a leap year.**
6. When is the longest day of the year?  
**The longest day of the year is 21st June.**
7. What is an eclipse?  
**An eclipse happens when the Moon moves between the Sun and the Earth and blocks the Sun for a short time**
8. Why is the Sun important for planet Earth?  
**The Sun is important because it gives light and heat to planet Earth.**
9. In what way can the sun be dangerous?  
**The sun can burn our skin and damage our eyes.**
10. Can you suggest some ways that we can protect ourselves from the sun?  
**We can protect ourselves by wearing sunglasses and sun cream.**

# The Sun

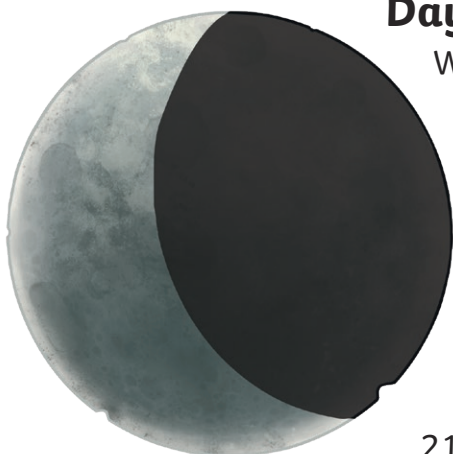
## The Solar System

The sun is the biggest star in the solar system. It is believed to be about 4.5 billion years old. The sun is located at the very centre of our solar system. The distance between planet Earth and the sun is about 150 million kilometres! The sun is made from hydrogen and helium gases.



## Leap Year

Earth is always moving around the Sun. This movement around the sun gives us our seasons. It takes  $365 \frac{1}{4}$  days, or one year, for planet Earth to complete one full rotation around the Sun. You can't have a  $\frac{1}{4}$  of a day! So, every four years, we add the four quarters together to make 1 full day. This is called a leap year. There are 366 days in a leap year. The extra day is added to the month of February meaning that February has 29 days, instead of 28, in a leap year.

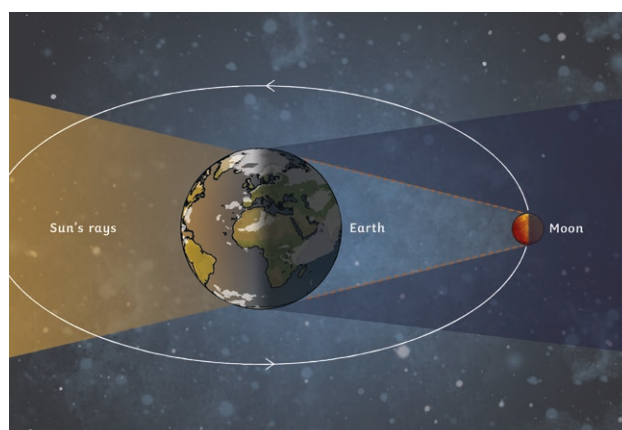


## Day and Night

While Earth is moving around the Sun, it is also spinning on its own axis. It takes Earth 24 hours to complete one full spin. It is the spinning of earth that gives us day and night. During the summer we have longer days and shorter nights, but during the winter we have shorter days and longer nights. The shortest day of the year is on 21<sup>st</sup> December. The longest day of the year is on 21<sup>st</sup> June.

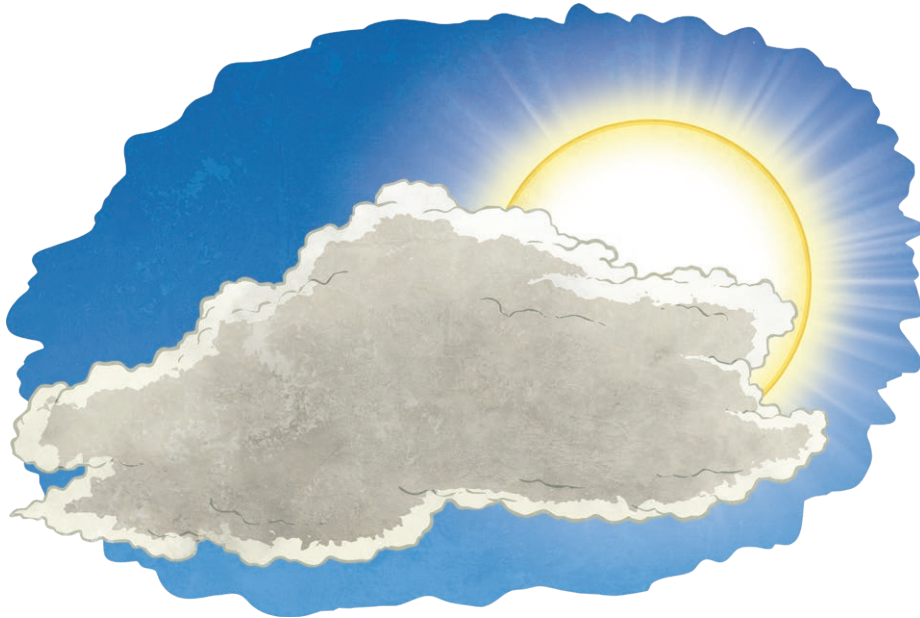
## Eclipse

A lunar eclipse happens when the Earth passes between the Moon and the Sun. This causes the Earth's shadow to block the Sun's rays from reaching the Moon.



## Dangers of the Sun

The Sun is very important for life on Earth. We need the sun for many reasons such as light, heat and food. Plants and animals also need the sun. Without the sun, we would not be able to survive. However, we must be careful because the sun can also be dangerous. Our skin can burn if we spend too much time in the sunlight. The rays from the sun can damage our eyes. We should never look at the sun directly. We can protect ourselves from the dangers of the sun by wearing sun cream. Sunglasses can help to protect our eyes.



# Questions

1. What is the sun?  

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2. What is the sun made from?  

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3. How old is the sun believed to be?  

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4. How long does it take the Earth to rotate around the Sun?  

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5. Explain how a leap year happens.  

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6. When will the next leap year occur?  

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7. Explain the meaning of the term lunar eclipse.  

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8. Give examples of ways in which the Sun is important for planet Earth.  

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9. Why would humans not survive without the sun?  

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10. Describe some precautions we can take to protect ourselves from the dangers of the sun.  

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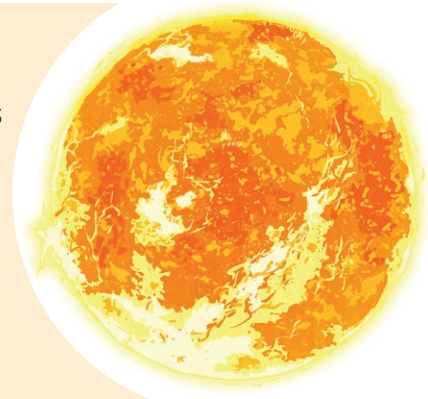
# Answers

1. What is the sun?  
**The sun is the biggest star in the solar system.**
2. What is the sun made from?  
**The sun is made from hydrogen and helium gases.**
3. How old is the sun believed to be?  
**The sun is believed to be about 4.5 billion years old.**
4. How long does it take the Earth to rotate around the Sun?  
**It takes  $365 \frac{1}{4}$  days, or one year, for planet Earth to complete one full rotation around the Sun.**
5. Explain how a leap year happens.  
**Every four years, we add the four quarters together to make 1 full day and this is called a leap year.**
6. When will the next leap year occur?  
**The next leap year will be in the year 2020.**
7. Explain the meaning of the term lunar eclipse.  
**A lunar eclipse happens when the Earth moves in between the Moon and the Sun.**
8. Give examples of ways in which the Sun is important for planet Earth.  
**The Sun is important because it gives heat and light to planet Earth.**
9. Why would humans not survive without the sun?  
**Without the sun, plants would be unable to grow meaning that humans and animals would not be able to survive. If there was no sun, there would be no heat or light which are both essential for humans to survive.**
10. Describe some precautions we can take to protect ourselves from the dangers of the sun.  
**We should never look directly at the sun. Sun cream is important for protecting our skin from the sun. Sunglasses can help to protect our eyes from the rays of the sun.**

# The Sun

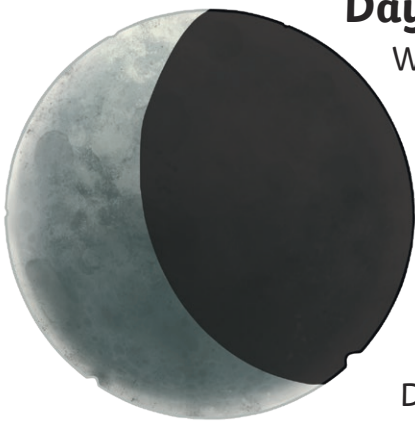
## The Solar System

The sun is the biggest star in the solar system. It is estimated to be approximately 4.5 billion years old. The sun is located at the very centre of our solar system. The distance between planet Earth and the Sun is about 150 million kilometres! The sun is made from hydrogen and helium gases.



## Leap Year

Earth is always moving around the Sun. This movement around the sun gives us our seasons. It takes  $365 \frac{1}{4}$  days, or one year, for planet Earth to orbit the Sun. You can't have a  $\frac{1}{4}$  of a day! So, every four years, we add the four quarters together to make 1 full day. This is called a leap year. There are 366 days in a leap year. The extra day is added to the month of February meaning that February has 29 days, instead of 28, in a leap year.

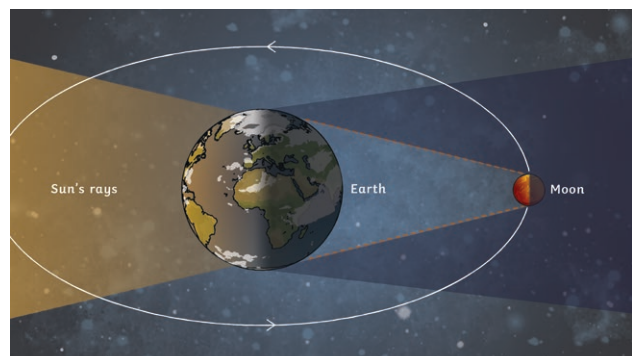


## Day and Night

While Earth is moving around the Sun, it is also spinning on its own axis. It takes Earth 24 hours to complete one full spin. It is the spinning of earth that gives us day and night. During the summer we have longer days and shorter nights, but during the winter we have shorter days and longer nights. The shortest day of the year, in Ireland, is on 21<sup>st</sup> December. This is the day that has the least amount of daylight hours. This day is also known as the winter solstice. The longest day of the year is on 21<sup>st</sup> June and this is known as the summer solstice.

## Eclipse

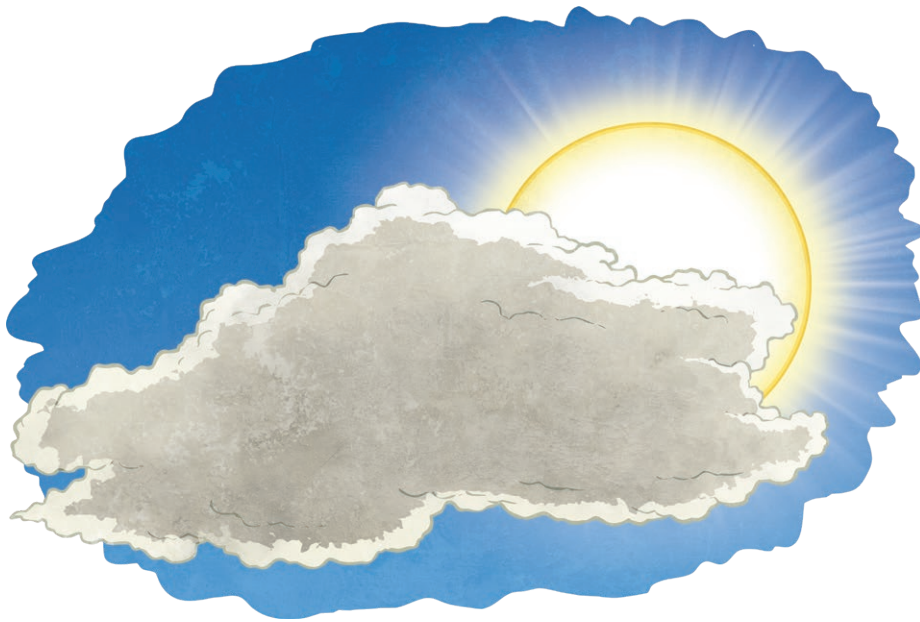
A lunar eclipse happens when the Earth passes between the Moon and the Sun. This causes the Earth's shadow to block the Sun's rays from reaching the Moon.





## Dangers of the Sun

The Sun is very important for life on Earth. We need the sun for many reasons such as light, heat and food. People get vitamin D from the sun which is important for keeping our bones strong. Animals and plants also rely on the sun. Without the sun, we, simply, would not be able to survive. However, we must be careful because the sun can also be dangerous. Sunshine contains ultraviolet rays, also known as UV rays, which we cannot see. These ultraviolet rays can be very damaging for our skin and eyes. We can protect ourselves from these rays by wearing sunhats, sunglasses, sun cream with a high SPF and by avoiding sitting in the sun when it is at its hottest.



# Questions

1. Where is the sun located?  

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2. What is the sun and what is it made from?  

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3. How old is the sun estimated to be?  

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4. How long does it take the Earth to orbit the Sun?  

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5. What is the summer solstice?  

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6. What month is changed during a leap year?  

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7. Explain the meaning of the term lunar eclipse.  

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8. Give examples of ways in which the Sun is important for planet Earth.  

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9. Why would humans not survive without the sun?  

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10. Describe some precautions we can take to protect ourselves from the dangers of the sun.  

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# Answers

1. Where is the sun located?  
**The sun is located at the very centre of our solar system.**
2. What is the sun and what is it made from?  
**The sun is a star and it is made from hydrogen and helium gases.**
3. How old is the sun estimated to be?  
**The sun is estimated to be 4.5 billion years old.**
4. How long does it take the Earth to orbit the Sun?  
**It takes the earth one year to orbit the Sun.**
5. What is the summer solstice?  
**The summer solstice occurs on June 21st and it is the day with the most hours of daylight in a year.**
6. What month is changed during a leap year?  
**February is changed during a leap year because it gets an extra day.**
7. Explain the meaning of the term lunar eclipse.  
**A lunar eclipse happens when the Earth moves in between the Moon and the Sun.**
8. Give examples of ways in which the Sun is important for planet Earth.  
**The Sun is important because it gives heat and light to planet Earth.**
9. Why would humans not survive without the sun?  
**Humans wouldn't survive without the sun because we need it for light, heat and vitamin D.**
10. Describe some precautions we can take to protect ourselves from the dangers of the sun.  
**We should never look directly at the sun and we should try not to sit in the sun when it is at its hottest. Sun cream, with a high SPF, is important for protecting our skin from the sun. Sunglasses can help to protect our eyes from the UV rays.**