The Solar Eclipse

What is the Solar Eclipse

The Solar Eclipse is when the Earth , the moon and the sun come in line with each other causing the moon to cast a shadow onto the Earth. The moon takes a month to orbit all the way round the Earth. The Earth takes a year to orbit the sun. Whenever the moon orbits round the Earth and faces the sun, it is usually too high to be in line with the Earth and sun. Alternatively it is too low (this happens because of the earth spinning on its axis). The Solar eclipse happens because the moon blocks the suns light causing certain parts of the world to go dark in this case Britain. The reason the eclipse didn't seem so dark is because we were in the penumbrae . The penumbrae is an area which does not receive the full shadow but instead receives a lighter shadow of the moon. However the umbrae receives the full shadow - Britain is in the penumbrae.

Safety Tips:

You should never look at an eclipse with a naked eye. However there are many ways too look at it.

- Special glasses
- Pin Hole paper
- Bucket of Water

What We Did:

Before the eclipse, everyone in the school went outside. During the Eclipse we used data loggers before, during and after the eclipse to record the amount of light and heat. We started recording at 9:00am and recorded the amount of light and sound every five minutes until 9:45am. On the next page, are the graphs we created from the average data.

We also used paper with a tiny pin hole in the middle to reflect the eclipse onto another piece of paper. We also used buckets filled with water to reflect the eclipse. In the window it was also reflected.

Children using data logger's

Children using pin hole paper

The results

Some of the year 6 children tallied up the results and found the average light and temperature levels for the different times. The results were converted into the graphs below.

The results show that the temperature dropped for a couple minutes and then later rose by a small amount. The light however, dropped , rose , dropped again and rose a lit-tle . The light dropped the greatest amount.