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2023



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2023

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Amazing **EARTH**



CHAPTER 1

If you are ever in **THAILAND**, look out for the rare ***IMPATIENS PSITTACINA***.

If you are lucky enough to **SPOT ONE**, look at its side profile and you will see why it gets called the '**PARROT FLOWER**'. This flower is so **ENDANGERED** that it is not allowed to be taken out of the country.

Pick your way to page 18 for more fantastic flower facts.

There's something in the **WATER**

SPOTS BEFORE YOUR EYES ▶

In summer, the water in Spotted Lake in Canada evaporates, leaving behind lots of different-coloured pools of water. The colours depend on the amount of various minerals in each little pool.



◀ **STRANGE SINKHOLE**

Off the coast of Belize in the Caribbean lies a vast sinkhole known as the Great Blue Hole. This huge hole in the ocean – the largest of its kind – is around 300 metres across and stretches more than 125 metres deep.

RAINBOW RIVER ▶

In the wet season the Caño Cristales river in Colombia looks like any other river. But in summer and autumn, the sun reaches special plants on the riverbed and turns them bright red. Together with the yellow and green sand, black rocks and blue sky reflected in the water, this has earned it the nickname the 'River of Five Colours'.



◀ COLOURFUL GEYSER

Over the years, minerals in the water of Fly Geyser in Nevada, USA, have built up into amazing 1.5-metre cones. The brilliant red and green colours on the rock are formed by algae growing on mineral deposits.

A LAKE OF ACID ▶

In the caldera of the Kawah Ijen volcano in Indonesia is a 1-kilometre-wide lake. Its vivid turquoise colour is due to the extremely acidic water, which contains dissolved metals.



Land of the midnight sun

An unusual phenomenon occurs in parts of Norway close to the Arctic – for a few months in the summer, the Sun never sets!

Right at the North Pole there is constant daylight for six months of the year. The midnight sun can be seen every day and it shines as strongly as it would at midday. As you go south from the pole, the midnight sun's strength, and the length of time it can be seen, both lessen. However, in northern Norway, which lies within the Arctic Circle, there are still periods of constant daylight in the summer months.

The midnight sun is caused by the fact that our planet is tilted on its axis. The tilt means that all over the world, day and night are not of equal length (they would be if Earth was upright!). The tilt also means that at different times of the year, different parts of Earth face the Sun. During the British summer, the northern hemisphere is tilted towards the Sun. At the northernmost point of the planet, that means 24 hours of sunshine a day.

Although Norway has been given the nickname 'land of the midnight sun', it's not the only place that experiences it. Parts of Russia, Greenland, Sweden, Finland, Iceland, Canada and Alaska are all far enough north to enjoy several months of full-time sunshine!



DID YOU KNOW?

You could also say that Norway was the 'land of midnight moon'. North of the Arctic Circle, there are a few months every year when the Sun never rises and it is constantly night or twilight.



WHAT'S GOING ON UP THERE?

STRANGE THINGS ARE AFOOT IN EARTH'S ATMOSPHERE...

A **SUN HALO** is the illusion of a ring, or halo, around the Sun. It's caused by light hitting ice crystals in the atmosphere.



MORNING GLORY CLOUDS

are usually only seen in one part of Australia. These huge 'tubes' of cloud can roll across the sky at up to 60 kilometres per hour!



The **AURORA BOREALIS** is a fantastic light show caused by electrically charged particles from the Sun that get caught in Earth's magnetic field.



WHITE RAINBOWS are formed when the sun shines through water droplets in fog. The tiny water droplets in the fog disperse the colours, making the bow look white instead of its usual colourful appearance.

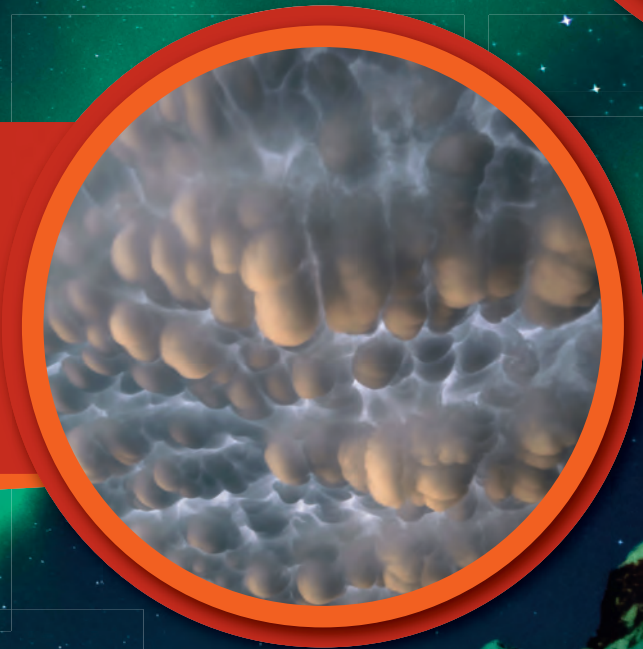


The **BROCKEN SPECTRE** only appears high in misty mountains. It's basically your own shadow being reflected off water droplets in the air, spreading a rainbow halo around your shadowy figure.

The **GREEN FLASH** may appear for a second or two just above the horizon over the sea, at sunrise and sunset. Water vapour in the atmosphere absorbs and scatters different colours of light to create this eerie green spot.



MAMMATUS CLOUDS are strange balls hanging from the bottom of clouds, which form when damp air sinks into dry air. They're often taken as a warning that bad weather is on the way!



LIGHTNING SPRITES are caused by electrical discharges in the air high above thunderclouds. They flash so quickly that few people ever see them properly.

