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weird but true!

2022

wild & wacky
facts & photos!

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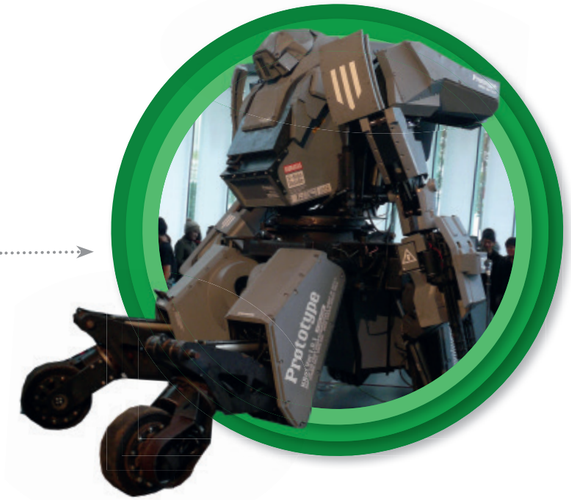
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CHAPTER 1

Amazing EARTH

The word **'VOLCANO'** comes from the **ROMAN** name **'VULCAN'.** Vulcan was the **ROMAN GOD OF FIRE.**



Read more about volcanoes on page 20.

10 Lightning-quick Facts about Lightning

LIGHTNING STRIKES Earth's surface at around 3 million times a day – that's nearly 44 times every second!

A **BOLT OF LIGHTNING** is about five times hotter than the surface of the Sun but is only about as thick as your thumb.

FULGURITE is a form of glass that is made when lightning strikes sand.

In the right – or rather, the wrong – conditions, helicopters can actually cause **LIGHTNING STRIKES!**

LIGHTNING has been observed on two other planets in the solar system – Jupiter and Saturn.

As well as **TRAVELLING DOWN** to Earth from clouds, lightning also travels up from the ground to the sky.

The air around lightning expands rapidly due to the extremely high temperature, creating an explosive **SHOCKWAVE** that we hear as thunder.

LIGHTNING FLASHES at the speed of light but strikes at less than half that speed – 270,000 miles per hour. That's still quick enough to reach the moon in under an hour.

There are many different types of lightning, including sheet, ball and sprite. There is even a phenomenon known as **'THUNDERSNOW'** where lightning can form in snow clouds!

Nine out of ten people **STRUCK** by lightning survive.

See the Wood FOR THE TREES



DYNAMITE TREE

The sandbox tree is one of the most dangerous trees in the world. It is covered in thorns, is poisonous and has exploding fruit. The sap of the sandbox tree can cause blindness. The fruit of the sandbox tree is poisonous and causes vomiting and diarrhoea. The fruits also explode, sending seeds flying through the air at over 240 kilometres per hour.

THE WOOD-WIDE-WEB

Before trees evolved, the surface of Earth was covered in huge mushrooms. They could reach 8 metres tall, which is about the same height as a house! Mushrooms are vital for trees and forests to grow. Beneath every forest there is a vast hidden network of pale thread-like structures called mycelia – these are all parts of the mushroom or fungus that you don't see. They help to provide trees with the nutrients they need and transport nutrients over long distances.



Totally **WEIRD!**

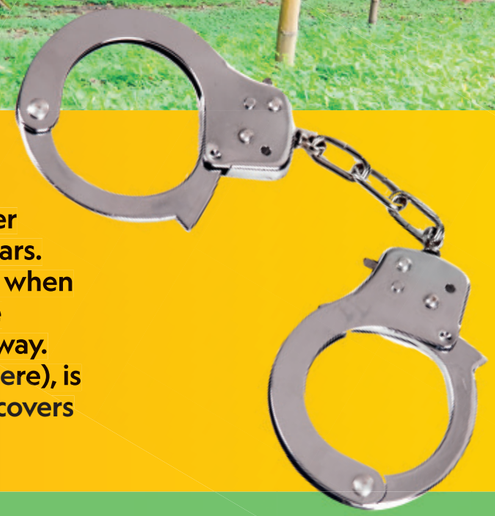
Over 2,000 years ago, during a battle a forest was used to crush an advancing Roman army. Literally. Trees in a forest in northern Italy were cut so that just a simple push would cause them to topple like dominoes. When the army marched through the forest, the trees were pushed onto them, leaving only 10 survivors.





TREE IN CUSTODY

A Banyan tree in Paksistan has been under arrest (and held in chains) for over 120 years. The tree was placed under arrest in 1898, when a British Army officer thought he saw the tree moving towards him in a suspicious way. Another Banyan tree, in India (pictured here), is the widest tree in the world – its canopy covers more area than two rugby pitches!



A door to HELL

THIS FIERY HOLE IN THE GROUND IS THE DARVAZA CRATER.

It is a 30-metre-deep pit that has been burning for over 40 years. It is located in a natural gas field in the country of Turkmenistan in central Asia.

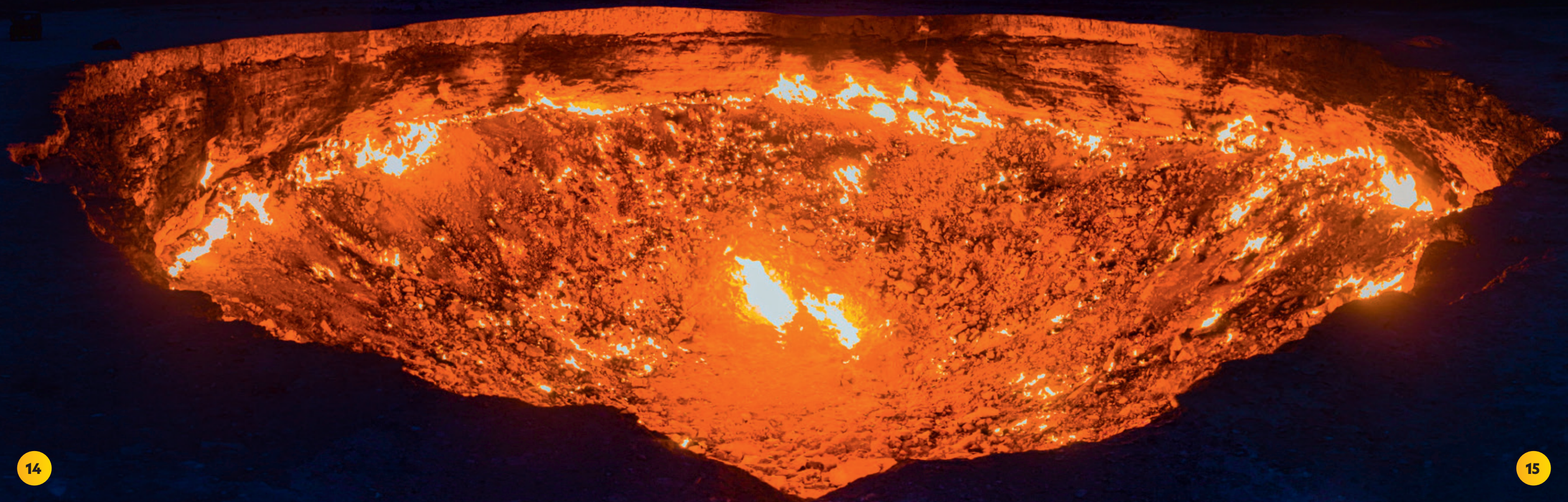
In the early 1970s, an oil rig fell into a hole in a natural gas field. It is thought that geologists decided to sort the problem out by setting the rig on fire. They thought that the natural gas in the hole would burn itself out very quickly. They were wrong!

The crater is known as the 'Door to Hell' and doesn't look like it could have anything living in it. Remarkably, scientists investigated the crater and found a number of extremophile microorganisms living in the depths of the fiery pit – these are creatures that can live in extreme environments.

Scientists study extremophiles because it is amazing that life can be found in such harsh environments. The existence of extremophiles suggests that living beings could be found elsewhere in the solar system – in places we never thought could sustain life.

Did you Know

You may have noticed that there are a number of countries in the world whose name ends in **'stan'.** There are seven of these countries in total: Pakistan, Uzbekistan, Turkmenistan, Kyrgyzstan, Tajikistan, Kazakhstan and Afghanistan. The 'stan' in each of these names comes from the **Persian word** for 'place of' or 'country'. Uzbekistan is the country of the Uzbek people; Tajikistan is the country of the Tajik people.



THERE'S WEIRD IN THEM THERE HILLS

LONG WAY DOWN...

Mount Thor in Canada, named after the Norse god of thunder, features the cliff face with the highest vertical drop in the world. The cliff is over 1 kilometre high (1,250 metres to be exact). It is actually steeper than vertical as it has a 105° overhang.

A LAND OF CHOCOLATE



These cone-shaped hills in the Philippines are known as the Chocolate Hills. They get their name from the plants that live on them, which turn a chocolatey-brown colour in the dry season. Legend has it that they were made by giants, but scientists think that they were made by coral being eroded by rainwater over thousands of years.



... AND ROLL BACK UP?

Some hills in the world seem to defy the laws of gravity. At places such as the appropriately named 'Confusion Hill' in California, 'Magnetic Hill' in Canada or the 'Electric Brae' in Scotland, cars appear to roll up hill!



CLOSEST TO THE MOON

Standing on top of Mount Everest, you'd be forgiven for thinking that you were on top of the world. And you would be higher than nearly everyone, but not people who had climbed to the summit of Mount Chimborazo, a volcanic mountain in Ecuador. This is because Earth is not a perfect sphere – it bulges out in the middle, meaning that people on the summit of Mount Chimborazo are actually closer to the Moon than the frostbitten climbers on Everest!