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First News

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THE UK'S ONLY
NEWSPAPER
FOR CHILDREN

COULD COVID-19 CURE THE CLIMATE CRISIS?

A GREEN RECOVERY PLAN FOR THE WORLD

THE world has only six months to change the course of the climate crisis, one of the world's top energy experts has warned.

by editor in chief **Nicky Cox**

Fatih Birol, from the International Energy Agency, says the coronavirus lockdown has led to a cut in carbon dioxide emissions across the world. But we need to keep going.

Emissions plunged by a global average of 17% in April – the sharpest drop in carbon output since records began. In the UK, the decline was about 31%. But, as countries slowly get back to normal activity, the decline has already bounced back to within about 5% of last year's levels.

That is still the biggest annual drop since the

Second World War, and much better than we've seen recently, with emissions rising by about 1% a year.

Emissions must fall to net zero by 2050 to meet the goals of the Paris agreement, signed up to by world leaders.

The experience of the pandemic so far has shown that changes in people's behaviour – such as not flying or driving, and working from home – is only part of the answer. The world still has a long way to go. Even with lockdown, most of the emissions have remained, so even bigger shifts are needed to the way the world produces and uses energy.

Fatih Birol says: "The next three years will

determine the course of the next 30 years and beyond. If emissions rebound, it is very difficult to see how they will be brought down in future."

That's why the IEA is urging governments to have green recovery packages for life after lockdown, with wind and solar power being a top focus.

And Lord Deben, chair of the Committee on Climate Change (CCC), says we need new schemes to insulate homes, to raise carbon taxes, to switch to electric vehicles and improve broadband, to help the green recovery and cut emissions for good. He said: "We have to do this as rapidly as possible – this window of opportunity is closing clearly."

ONLINE NATION

Brits are spending a quarter of their lives online, shows new research by Ofcom, the UK's communications watchdog. Its annual Online Nation report has found that the average Briton spends a quarter of their waking day online in some way. And lockdown may be partly to blame for the latest, higher than normal, figures. Ofcom says the average British adult is spending four hours and two minutes online every day, a 14% increase from last year's average of three-and-a-half hours every day. At least you're taking a break to read a newspaper!



LOCAL LOCKDOWN

Leicester has become the first location of a local lockdown in the UK, after a recent spike in cases of COVID-19. The number of infections in the city has increased by 866 in just two weeks. The Government has said all non-essential shops must close, as well as schools (except for vulnerable children and the children of key workers). The easing of lockdown in England on 4 July, when pubs, restaurants and hairdressers can open again, will not apply to Leicester. The new restrictions will apply for at least two weeks.

ROYAL COOKS



The Duke and Duchess of Sussex showed off their cooking skills when they helped make meals for a youth organisation in LA. Prince Harry and Meghan Markle joined Homeboy Industries to cook meals as part of their Feed Hope programme, which provides food for those in need during the coronavirus pandemic.

QUICK NEWS

TO READ YOURSELF AND SHARE WITH FRIENDS

COOKALONG 4 FAMILIES

Food manufacturer Danone has launched a new initiative to get families cooking together to raise money for charity. The series of live cooking tutorials for the whole family have been airing on the Danone YouTube channel. Called Cookalong 4 Families, the videos have been hosted by a bunch of different celebs, including The Saturdays' Frankie Bridge. For every viewer of the livestream, the company is donating £1 to the Family Action charity. The last one airs on 8 July.



COVID-19 US CASE RISE

The US state of Texas has seen a huge rise in cases of COVID-19. The state was among the first to start lifting lockdown but has now seen one of the biggest surges in new US infections, with thousands of confirmed cases a day. Governor Greg Abbott has urged people to stay home for their own safety. Restaurants, shopping centres, bowling alleys and some other businesses can stay open, but with limits on how many people can visit.



TIGER TREATS

Three tiger cubs at Whipsnade Zoo celebrated their second birthday with an unusual (and kind of yucky) treat – a giant ice lolly made of blood. The rare Amur tiger cubs, Dmitri, Makari and Czar, are almost fully grown now, so polished off the lolly quickly, which also helped keep them cool in the hot weather last week.

ULTRA-RARE POKÉMON

An ultra-rare Pokémon card is expected to 'catch' a whopping £88,000 at auction next week. The card is one of seven given to the first-place winners of a Pokémon card tournament in Tokyo, Japan, way back in August 1999 – which means the card itself is very likely older than you! It's so rare that Heritage Auctions has referred to the Pokémon Super Secret Battle No 1 Trainer card as the "holy grail" for Pokémon collectors.

PUNGENT POST

A suspicious smell coming from inside a German post office resulted in six workers being rushed to hospital and a mass evacuation. After a thorough investigation, local police and firefighters discovered a package of four Thai durian fruits lurking in the Schweinfurt post office. Despite being viewed as a delicacy in many areas of the world, durian fruit is known to be very smelly – so smelly, in fact, that it is actually banned in many hotels and across public transport in Asia.

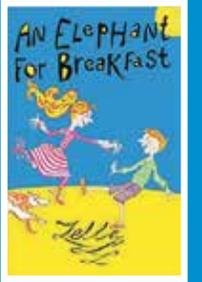
HIDDEN FIGURE HONOURED

Mary W Jackson, an African-American engineer who saw little credit for her work as a NASA engineer, has been honoured by the space agency, which has renamed its headquarters after her. Sadly, she isn't around to see it today, as she died in 2005.



READING FOR WILDLIFE

A new campaign called Reading for Wildlife is bringing together authors, artists, conservationists and industry leaders to raise awareness of the illegal wildlife trade by reading *An Elephant For Breakfast* by Zella. For 27 days throughout July, a different author, artist or activist will read a chapter of the book on the Reading for Wildlife by Zella YouTube channel. First News' own Editor in Chief, Nicky Cox, is one of the 27 readers taking part in the campaign! You can find out more at www.zellahunter.com.



#STOPHATE4PROFIT

Companies including Coca-Cola have pulled their ads from Facebook, saying the social media giant doesn't do enough to stop hate speech. Facebook makes its money from adverts, and is losing billions as a result of the action.

BEYONCÉ SUPPORTS BLM

Beyoncé has voiced her support for Black Lives Matters (BLM) protesters, and called on supporters to "vote like our life depends on it". Beyoncé made the call to action during the BET awards, which celebrate black artists and sportspeople, after receiving the humanitarian award, given by former First Lady of the US, Michelle Obama.



VOICES 2020

The 12th Doctor, Peter Capaldi, has been announced as the host of this year's virtual Voices 2020 Awards show. The creative writing competition for children in care and young care leavers will celebrate its fifth year with a special show, streamed on the Coram Voice YouTube channel, at 5pm on 5 July.



500 WORDS ON THE BLACK LIVES MATTER MOVEMENT



500 WORDS is the world's largest story-writing competition for kids.

More than a million stories have been submitted since 2011, in response to everything from technology to climate change. Now, the team behind it are bringing children's voices to the themes and issues emerging from the Black Lives Matter movement.

But, be quick! You've only got until tonight (11.59pm on Friday 3 July) to get your entries in. Children aged between 5 and 13 can enter in whatever way you wish, in no more than 500 words, in the form of a story.

The judges are keen for kids to draw on their own experiences and feelings to create a story that can be as imaginative and visionary as you want. Storytelling is a must!

From 13 to 16 July, four semi-finalists in each age group will be chosen. Then the judges will decide who will become the two finalists, and the eventual winner of the final on Friday 17 July.

The finalists will be invited to attend an exciting day of events with special guests, starting out at Chris Evans' Virgin Radio Breakfast Show with many special surprises to follow (as soon as lockdown guidelines allow it).

The words of many stories will be read out on air by special guests throughout the competition.

So, what are you waiting for?! Get writing and send your story via the online entry form at [500words.me](https://www.500words.me).

LEFT WITHOUT FOOD IN LOCKDOWN



GOVERNMENT data has shown that the number of families reducing the amount of food they ate, or who relied on food banks, rose significantly during the first months of lockdown.

The data, which comes from the Food Standards Agency (FSA) and only covered England, Wales and Northern Ireland, found that between 6.3 million and 7.7 million adults were forced to reduce portion sizes. Between 2.7 million and 3.7 million adults went to a charity for food or used a food bank, because they didn't have enough money to feed themselves during lockdown.

The FSA found that the majority of those with difficulties getting enough food were households with children, people with health issues and people aged 16-24. Older people aged 55-75 were found to be most able to feed themselves, with just 4% skipping meals in May.

A Government spokesperson said: "To help those who are struggling to afford food and other essentials, we are supporting frontline charities and community groups with a grant of up to £16 million."

A.I. ACTOR

AN Artificially Intelligent (AI) robot actor has been given a starring role in a \$70 million movie (£56.4m).

Meet Erica, the AI star of a new sci-fi film, called *b*, which is about an artificially intelligent woman, also called Erica, who escapes from the lab that created her.

Usually, Erica's part might be played by a CGI character, or an actor in make-up. Instead, the film-makers decided to work with Japanese scientists Hiroshi Ishiguro and Kohei Ogawa to actually build a robot actor.

One of the visual effects artists behind the film explained just what that meant. "She was created from scratch to play the role! [We had to] control the speed of her movements, talking through her feelings and coaching character development and body language."



POLL OF THE WEEK

Would you watch a film that stars an AI actor? Go to [first.news/polls](https://www.first.news/polls) to vote



WOW!

NASA is planning on returning to the moon in 2024 and, while NASA's experts figure out the rocket science bit, they want your help in designing a new high-tech space potty that can fit on the new lunar landers.

The space organisation officially launched a challenge with crowdsourcers Hero X to find the next generation of moon toilets and, while it may sound silly, they're being very serious about it, offering huge prizes to the best design.

Winners of the Junior Design Challenge will be given a bunch of awesome space prizes – including a certificate from NASA. Those entering the more grown-up Technical Design Challenge could take home \$35,000 (£28,000)!

There are lots of guidelines around the lunar loo's design, so to find out more and enter your own space toilet's sketch, head to www.herox.com/LunarLooJr.

JAIPUR, INDIA



Getty

A SWARM of locusts flies over the walled city of Jaipur. The invasion of these crop-munching insects is the worst that India has faced for decades.

NEW YORK, USA



Getty

MOTORCYCLISTS with Black Lives Matter signs ride through New York City, as they take part in the 50th anniversary celebrations of the first ever Pride march. Due to the ongoing coronavirus pandemic, this year's official parade was cancelled, although some still took to the streets to celebrate.



LONDON, UK

CONGRATULATIONS to First News' Managing Editor Keilly Swift and her husband Nick on the arrival of their second daughter, Elodie Robyn Eve. Elodie arrived on Sunday 21 June, weighing 8lb 3oz. Amelie is very proud to be a big sister!



Getty

LOS ANGELES, USA

A pop-up art installation outside City Hall features nearly 1,200 teddy bears to send a powerful message. The Bear the Truth Organization aims to raise awareness of the Black Lives Matter movement and end racism.



TORONTO, CANADA

OUTDOOR fitness classes take place inside domes to fit in with social distancing measures, to help control the spread of COVID-19.



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WHAT ARE THE RULES?

AFTER crowds crammed on to beaches during last week's heatwave, and football fans gathered on the streets of Liverpool to celebrate the club's Premier League win, Government and local officials are urging people to remember the social distancing rules and be sensible.

The local council declared a 'major incident' at Bournemouth beach due to overcrowding – it would have been easy to think that the lockdown was over. But Health Secretary Matt Hancock threatened to close down beaches if social distancing rules weren't obeyed, while England's chief medical officer, Professor Chris Whitty, warned that if we don't all follow the social distancing guidelines then cases of COVID-19 will rise again.

From 4 July in England, if you can't stay 2m apart, you should stay 'one metre plus' apart, while reducing the risk, e.g. by wearing a face mask. In Northern Ireland, it will be 1m with restrictions, in Scotland and Wales it remains 2m. Two households can meet indoors (except in Wales) or outdoors, but they must follow social distancing. The number of people who can meet varies depending where in the UK you live. Playgrounds, restaurants, museums, cinemas and hairdressers can open if they follow the guidelines.

THE FUTURE OF CINEMA AND THEATRE

NO pick 'n' mix but there will be thermal imaging cameras. What exactly will it be like going to the cinema or theatre as lockdown starts to ease?

Now theatres and cinemas have been given the go ahead to reopen, what will a trip to the movies or to see a musical involve?

Here's what to expect:

- No pick 'n' mix
- No singalong screenings
- With the new 'one metre plus' rule there'll be a gap of two seats between different groups, but you will be able to sit with your family or friends
- Film start times will be spread out to make sure not everyone arrives at the cinema at the same time
- You might have to queue in the car park before going in

Things are not so straightforward with theatres though. Although they are allowed to reopen and start rehearsals for shows, as long as they stick to the social distancing rules, they are not allowed to stage live productions yet.

However, composer Andrew Lloyd Webber is planning on doing a trial of safety measures in July to show the Government that theatres can reopen without social distancing and help get live shows back on stage sooner. He's using similar methods to the ones they're using in a touring production of *The Phantom of the Opera* in South Korea. There, they've been using thermal imaging cameras to measure people's temperature and self-cleaning antibacterial door handle covers. The audiences have also been wearing face masks and using hand sanitiser. We'll have to wait and see if it works.

EDITOR'S COMMENT



THE coronavirus pandemic has been difficult for people all over the world.

But, among all the bad news about it, there is a glimmer of good news – it might help the climate crisis (front page).

Now we've shown what can be done, it's down to all of us to try to keep up some of the behaviours of lockdown that have helped the planet – like fewer car journeys. And, it's also up to world leaders to adopt green recovery plans for their countries. Let's hope they don't waste the chance.

GOOD WEEK FOR...

MICHAEL ROSEN

THE children's author is back at home after being admitted to hospital with coronavirus at the end of March.



BAD WEEK FOR...

DENMARK'S PM

DENMARK'S prime minister, Mette Frederiksen, has had to postpone her wedding for a third time. This time it's to go to an EU summit about a COVID-19 recovery fund. She says that she hopes to get married soon.



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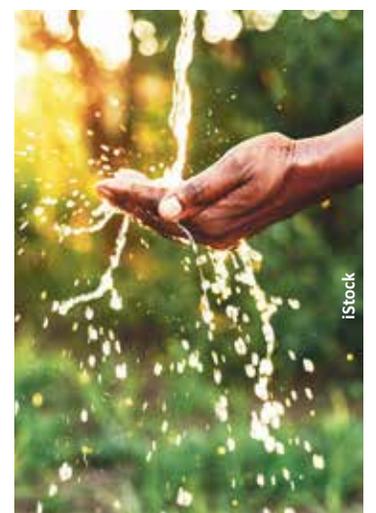
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MILLIONS CAN'T WASH THEIR HANDS

WE all know how important it is to wash our hands, but did you know that one billion people in the world still don't have basic hand-washing facilities?

One of the key ways to help stop the spread of COVID-19 is washing your hands properly, but charity UNICEF has revealed that people in the most vulnerable countries still aren't able to do it. In the 60 highest-risk countries, two out of three people don't have hand-washing facilities at home so are at more risk of catching the disease. UNICEF is launching a global initiative to make sure people get the help they need.



ENGLAND

● Clap for Carers is back

Get ready to start clapping again, as the boss of the NHS would like the Clap for Carers to return to help celebrate the service's 72nd birthday. On 5 July at 5pm people are being asked to give the NHS a big round of applause. TV broadcasters will pause their transmissions as a mark of respect and public buildings will be lit up blue for the NHS.



Getty

LONDON

● Sad anniversary

On 7 July, a remembrance ceremony will be held in Hyde Park to remember the 52 people who were killed in coordinated terrorist attacks in central London 15 years ago. Three bombs went off on the Tube, and a fourth on a bus. Three of the attackers were British and one was born in Jamaica, and they said that the attacks were revenge for the way that Britain treated Muslims around the world. Attacks like this are very rare. If you're upset by events like this, please talk to a trusted adult.



Getty

The 7/7 memorial in Hyde Park

GLASGOW

● Police officer stabbed in city centre attack

A Sudanese asylum seeker was shot dead by police last week after he stabbed six men, including a police officer and two members of staff at the Park Inn hotel. Around 100 asylum seekers were being housed in the hotel during the lockdown, including the 28-year-old attacker, Badreddin Abadlla Adam. The three other victims were also asylum seekers, and all are being treated in hospital. Police aren't treating the incident as a terrorist attack and are investigating possible motives. One guest at the hotel said that Mr Adam was upset at his treatment. Remember that events like this are only in the news because they don't happen often.



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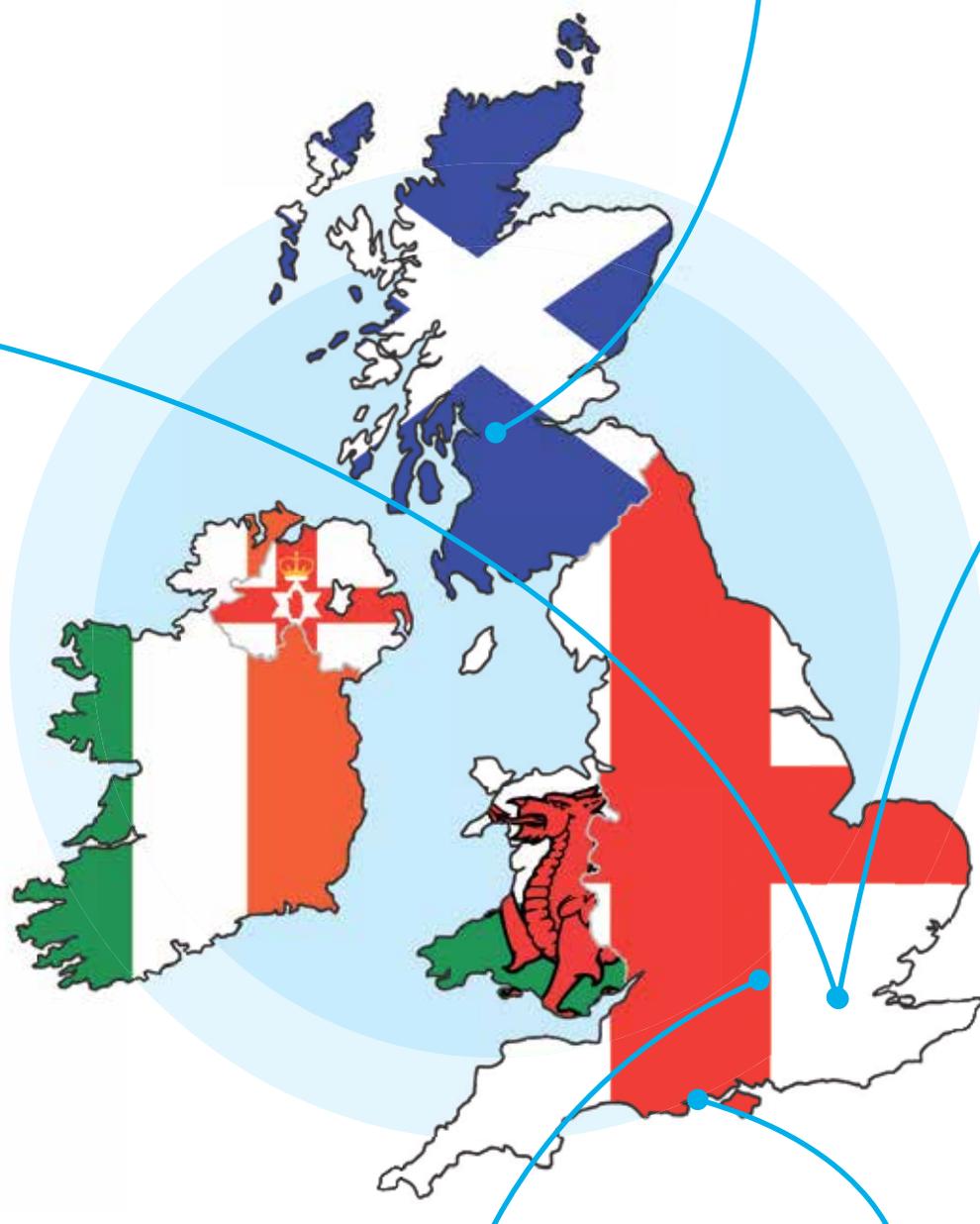
UK

● Help for homeless

The Government has pledged £105m to councils to make sure homeless people have somewhere safe to stay after lockdown. During the pandemic around 15,000 rough sleepers were placed in hotels and B&Bs to help them self-isolate. But with hotels due to reopen on 4 July, charities are concerned that many people will become homeless again. The funding is intended to be used as a temporary solution until the Government has worked out longer-term plans.



iStock



LONDON

● Police break up parties

The Met Police says it is "building relationships" with communities, following several illegal street parties in the capital in the past few weeks that resulted in police being attacked. Police Commissioner Dame Cressida Dick said the force had a "duty" to stop unlawful music events during the COVID-19 pandemic.



Snapchat

OXFORD

● More diversity

Oxford University has revealed that, last year, one in five new undergraduates were from BAME (black, Asian and minority ethnic) backgrounds. The proportion of British students from BAME backgrounds is now 22.1%, up from 14.5% in 2015. However, some of the colleges and courses are more diverse than others. The university's Annual Admissions Statistical Report showed that between 2017 and 2019, 36% of students starting a medicine course were BAME, compared to 10.5% for biomedical sciences.



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BOURNEMOUTH

● Beach crowd fears

A 'major incident' was declared at Bournemouth Beach as thousands of people went to the seaside on one of the hottest days of the year so far. There were concerns that the beach was so busy that people weren't able to social-distance properly and were at risk of spreading the coronavirus. There were an estimated 500,000 visitors in Dorset on Thursday 25 June, roads were gridlocked, beaches packed and there were reports of fights breaking out. After everyone left, 33 tonnes of rubbish had to be cleaned up from along the coastline.

REBUILDING OUR SCHOOLS

THE prime minister has announced a £1 billion fund to improve schools all across England.

The new ten-year-plan will see new school buildings built and classrooms improved.

It's thought construction work will start on the first 50 new projects in September next year.

Although many welcomed the plans, there are concerns that it's still not enough. Kevin Courtney, Joint General Secretary of the National Education Union, said: "There are currently 3,731 school buildings in urgent need of immediate repair. In 2017, the National Audit Office estimated it would cost £6.7bn to bring the school estate up to standard; that figure will now be much higher because there has been three years of decline. The Government has cut annual expenditure on school buildings by more than £1 billion in the last two years."

The Government says that the "rebuilding projects will be greener, helping meet the government's net zero target".



HOW HAS LOCKDOWN MADE YOU FEEL?



istock

A CHARITY is warning that the coronavirus pandemic could be having a massive effect on young people's mental health.

The Childhood Trust is worried that disadvantaged children are facing huge mental health problems due to lockdown. Young people interviewed during the pandemic by the charity revealed that they were really concerned about their family's health, schools being closed, a loss of routine, not being around other people and what the future holds.

The charity also revealed that young people living in abusive homes have become even more isolated during lockdown, as the places they'd usually go to for support, such as schools and youth clubs, are closed.

Dr Maria Loades from the University of Bath says in the report: "Current social distancing measures enforced on children

because of COVID-19 are likely to increase the risk of depression and probably anxiety, as well as possible post-traumatic stress."

Although mental health support for children has now adapted and become digital and virtual because of the pandemic, many disadvantaged children don't have access to computers so are not getting the help they need.

The Childhood Trust has launched its Champions for Children campaign to try to raise £3 million for 96 charities that help 17,000 young people in London.

If you're worried about your mental health and want to know ways you can look after it, check out FYI's video, *Mental health: how do I stay mentally healthy?* at [first.news/idgi](https://www.first.news/idgi).

SCHOOL PLACES NEEDED FOR SYRIAN REFUGEES

A GROUP of charities have come together to ask world leaders not to give up on the hundreds of thousands of Syrian refugee children who are still not in school.

In 2016, world leaders pledged that all children who had been forced to flee the war in Syria would be given a school place within a year. However, four years later, almost 750,000 Syrian refugee children are still not in school.

While out of school, these young people are more at risk of things like early marriage and child labour.

In an open letter, charities including Save the Children and World Vision are calling on leaders around the world to help these vulnerable children get an education.



Getty

PRICEY POOCH!

MEET the world's most expensive sheepdog.

Elan Valley Sally, a 19-month-old border collie from Brecon, was bought by an anonymous bidder at an online sale for a whopping £19,451.

The owner had posted videos of Elan Valley Sally in action on YouTube and Facebook so that buyers could see her super skills in action. The average price for a working dog is usually about £2,000.



Wales News Service

POLAND



● Election division

Last weekend, voters in Poland held the first presidential election in the European Union since the pandemic started. Current president Andrzej Duda (pictured) took home 43% of the vote, which wasn't quite enough to win. He'll now face his closest challenger, Rafał Trzaskowski, in a second election on 12 July. Mr Duda's campaign has been criticised for being anti-LGBT rights.



TANZANIA



● Gemstone jackpot

A Tanzanian mining boss has earned £2.7 million (7.74bn Tanzanian shillings) after discovering two record-sized tanzanite gemstones. The stones, found only in a small northern region of the East African nation, have been bought by the government to be put on show in Tanzania's national museum. The boss will share 10% of the money among the miners who found it, and the rest will go towards building a new shopping centre and school for the local area – after he's thrown a party!

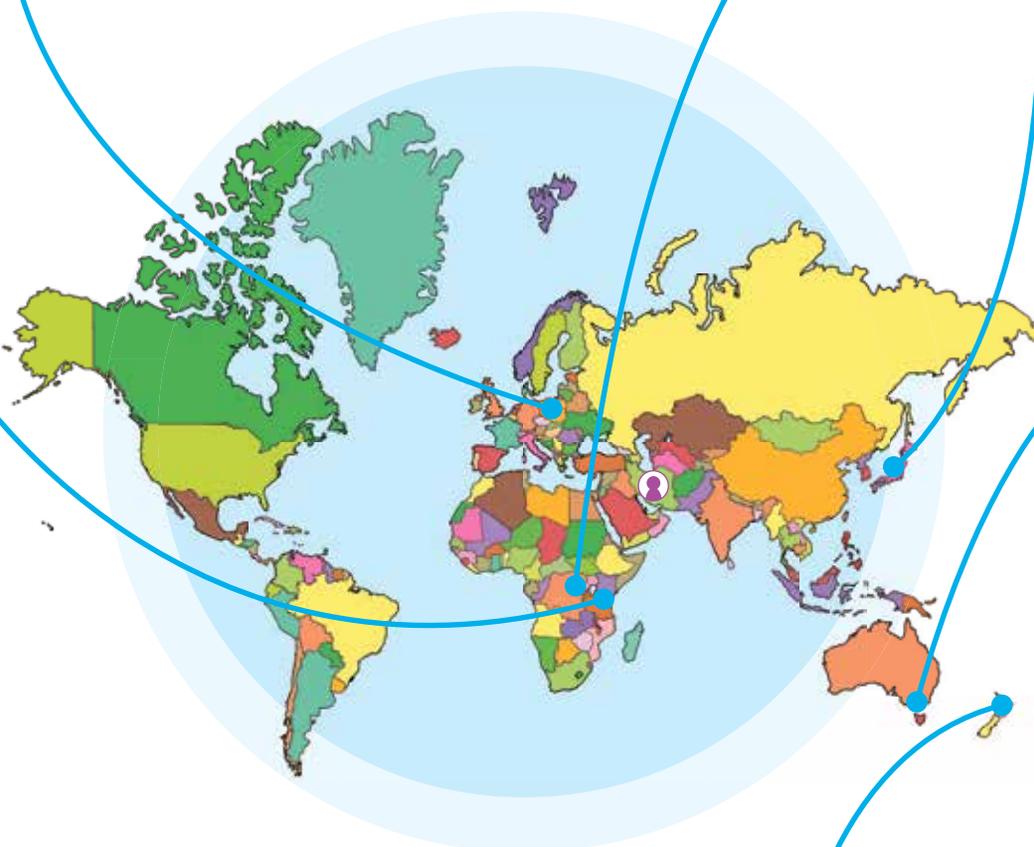


THE DEMOCRATIC REPUBLIC OF THE CONGO



● Ebola wiped out again

The Democratic Republic of the Congo (DRC) has declared that its tenth outbreak of Ebola is officially over. More than 2,200 people have died since the latest outbreak began in August 2018. The World Health Organization says the end of the outbreak was the result of hard work across all parts of the government. More than 320,000 people were vaccinated against Ebola – the largest ever campaign against the disease.



JAPAN



● Ninja studies

A Japanese university has awarded its first ever degree in ninja studies. Genichi Mitsuhashi, 45, completed his Master's course at Mie University in central Japan. Along with studying the history of the famously stealthy, black-clad warriors, Genichi Mitsuhashi learned how ninjas lived long ago. According to his research, ninjas were farmers during the morning, then trained in martial arts in the evening – so he did the same! "With this combination, I thought I could learn about the real ninja," he said.



AUSTRALIA



● Panic buying returns

Several Australian shops have reintroduced limits on the purchasing of goods including toilet roll, hand sanitiser, eggs and pasta, following a surge in panic buying. Shoppers began buying the products in bulk after there was a spike in COVID-19 cases in the state of Victoria. The country's prime minister, Scott Morrison, said that there was no reason to panic buy.

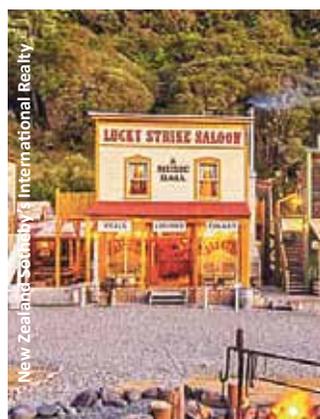


NEW ZEALAND



● "Wild west town" for sale

Mellonsfolly Ranch is a replica of an 1860s frontier town in Wyoming, USA, and is available to buy for £9.4 million (\$11.6m) to those looking for an authentic western movie experience – in New Zealand. Along with getting their own town, the new owner would be allowed to move to New Zealand – something currently forbidden for foreigners looking to buy a home in the country.



OUR WORLD



NAME: PARISA
LIVES: IRAN



TO FIND OUT MORE, GO TO
WWW.UNHCR.ORG/PROTECTREFUGEES

SHE may be four years older than the other girls in her class, but Parisa looks forward to going to school every day.

"I love school so much," says Parisa. "My favourite subject is maths, because maths is everywhere in the world."

Parisa, now aged 16, and her family fled Afghanistan ten years ago to escape fighters who were terrorising their neighbourhood. Arriving in Iran, they found safety, but barely had enough money to live on, let alone cover the fees for school.

But in 2015, Iran said it would allow all Afghan children to attend the country's state schools. Thanks to the government and UNHCR, Parisa got her first taste of a proper education when she was able to go to a brand-new primary school.

"I am so happy that I can study side by side with Iranian students," says Parisa, who wants to use her education to help children in her native country.



© UNHCR



The balloon will drift to the edge of space

Space Perspective

UP, UP AND AWAY

VISITING outer space is still a distant dream for anyone who isn't an astronaut, but a day trip to the stars is already open for bookings!

A new company, Space Perspective, is planning uncrewed tests next year. If successful, reaching the outer edges of the atmosphere could be as easy as flying abroad in a few years' time.

The plan will be for a crew and up to eight passengers to travel in Neptune, a pressurised capsule attached to a balloon the size of a football stadium filled with hydrogen.

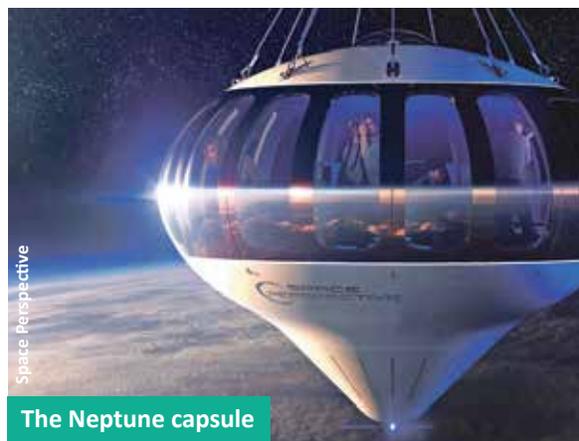
They will drift upwards right to the edge of space, 30km above the Earth. There, space tourists will be able to look back at the Earth and out to dark space and the sight of millions of stars. Although the price is yet to be fixed, the luxury flight, which will take six hours, is likely to cost over £100,000. Because the capsule remains within the Earth's atmosphere, no special suits or training are needed. It means that older people or those with health problems won't be excluded.

One downside (apart from the price!) may be the method of landing back on Earth. The balloon drifts back down from the stratosphere until it splashes down in the sea. Passengers, crew, capsule and balloon are then recovered by ship.

Space Perspective will run tests from the Kennedy Space Center in Florida, but it has big plans to operate up to 500 flights from various sites across the USA by 2024.

The race to get tourists into space is hotting up. Neptune faces competition from the Stratollite, a balloon being developed by a company called World View Enterprises, while the super-rich Richard Branson, Jeff Bezos and Elon Musk are all pouring money into developing commercial space vehicles. The advantage of the balloon is that it will be cheaper than a space plane or rocket.

Space tourism may soon be a reality, but how visitors get there is still a very open question.



Space Perspective

The Neptune capsule

COAL CATASTROPHE



iStock

NEW evidence of previous global warming and mass extinctions is worryingly similar to what is happening now, one expert says.

Professor Lindy Elkins-Tanton of Arizona State University in the USA believes that her findings show us how the Earth responds to massive change long-term. She thinks the recently discovered evidence should drive urgent change to save the planet.

There was a mass extinction of almost all animal life 252 million years ago (the Permian-Triassic extinction), but the cause has challenged scientists for years. There have been many theories about how it happened.

One of the most widely believed was that the burning of coal on a huge scale had caused climate change, which in turn was catastrophic to existing life. Professor Elkins-Tanton and colleagues turned their attention to a volcanic region of Siberia, Russia where it was known that magma and lava flows had burned their way across the landscape.

They collected over 500kg of volcanic rock and were surprised to find plenty of burnt material, including wood and coal. Professor Elkins-Tanton said: "We found towering river cliffs of nothing but volcanoclastics [rocks created by explosive volcanic eruptions] lining the river for hundreds of miles. It was geologically astounding."

It suggests that the heat of volcanic material burned coal in the ground and plant life in big enough quantities to create air pollution that caused climate change. The Earth suffered massive global warming at the time, which increased the temperatures of the seas and eventually killed off 96% of all marine life on the planet.

MEET THE SLOTHBOT!

CONSERVING endangered animals could be helped by the arrival of the SlothBot.

Currently being tested before being put to work, the cute-faced robot designed by scientists at the Georgia Institute of Technology in the US will monitor animals and plant life. It is powered by solar panels and hangs on a wire suspended between two trees. The energy-efficient SlothBot moves slowly like a real sloth, collecting information such as the temperature, weather and the carbon dioxide levels of the area.

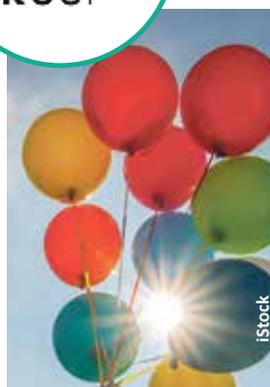
With its strong outer casing that protects the machinery inside, the Slothbot can be left in place for months, saving scientists years of field research.



Rob Felt, Georgia Tech

SCIENCE MUSEUM GROUP

This report is from the Science Museum in London



iStock

HAVE you ever been given one of those balloons that float away when you let go?

These aren't the sort you blow up yourself using air, but are in fact filled with a gas called helium.

But what do we know about helium? Well, imagine the balloon. We know that what's inside it is a gas because it is filling up all the space inside the balloon and, when you squeeze it, it bounces back into its original shape.

The balloon also rises in the air, and if you push it down it comes back up. This tells us that the gas inside the balloon is lighter than air.

You can learn more on the BBC iPlayer, where the Science Museum Group and BBC Bitesize Daily bring you some jaw-dropping science demonstrations and experiments to try at home. See www.bbc.co.uk/iplayer/group/p089nk5f.

THE research shows a mixed picture of lockdown life for teenagers, showing a big increase in snacking, fresh enthusiasm for cooking and a new enjoyment of eating as a family.

The study of more than 1,000 teenagers, by Bite Back 2030 and the Guy's and St Thomas' Charity, also shows a gap between the rich and poor when it comes to diet, with an appetite among young people for a fairer food system.

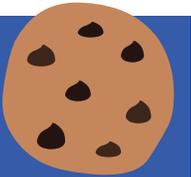
Christina Adane is co-chair of Bite Back, a youth-led organisation campaigning for good food and good health for every child and young person growing up in the UK. She said: "I want to be part of a world where our health is the priority of the food industry. There are enough people that think the same way for this change to happen; we just need to take the opportunity that lockdown gave us to have a fresh start."



HUNGRY FOR CHANGE

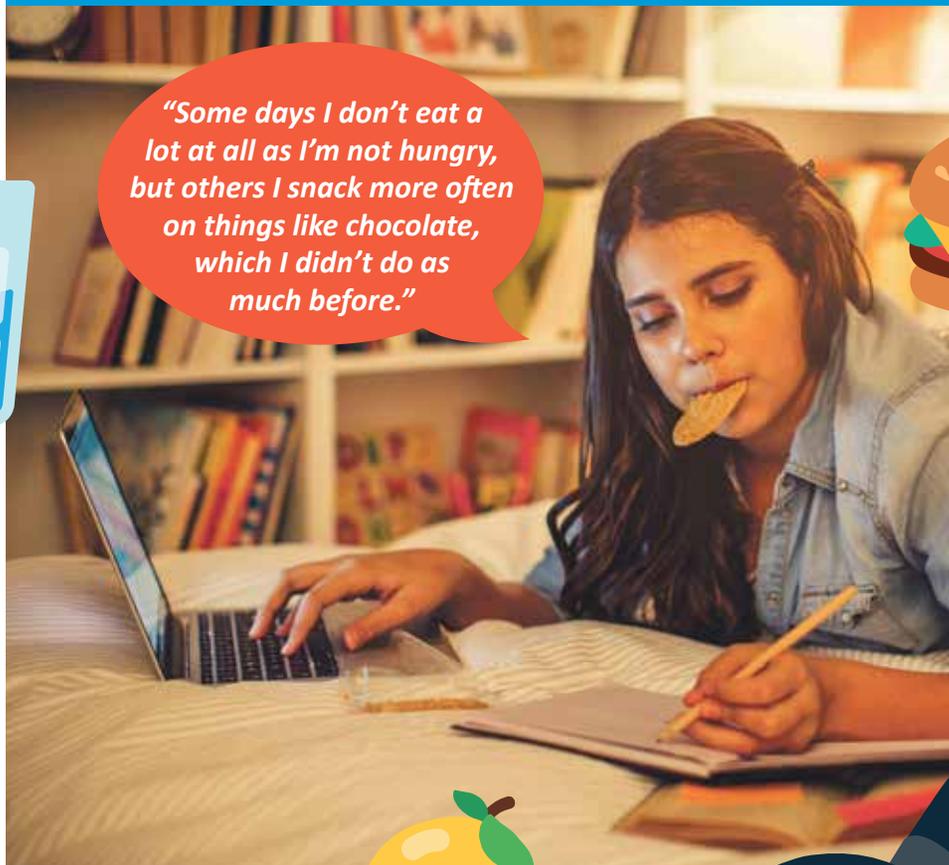
BITESIZE

Despite more home-cooked meals, not being in school led to an increase in snacking, with 40% snacking more – often on crisps and chocolate – under lockdown. The research showed that children in poorer homes were more likely to snack and less likely to eat fresh fruit and vegetables than those in wealthier homes.



First News has been looking at a new report showing how young people's eating habits have changed during lockdown.

"Some days I don't eat a lot at all as I'm not hungry, but others I snack more often on things like chocolate, which I didn't do as much before."



"I feel I am drinking more water than I was before lockdown. I guess it's the only thing I can really drink right now easily."

BITESIZE

One of the good effects of lockdown has been an increase in the amount of water being drunk by teens. The research showed that, because it was less easy to get out to buy drinks, the taps at home had encouraged more than half of young people to drink more water.



Following the research, Bite Back 2030 wants the Government to think about these five things ahead of new anti-obesity plans expected to be announced later this month:

1. Ensure no child goes without a decent meal in the school holidays, no matter where they live
2. Make healthy foods cheaper than unhealthy foods
3. Make it easier to get drinking water, wherever they are
4. When it comes to advertising, put healthy options centre stage and take the spotlight off junk food
5. Redesign the high street to include healthy, safe spaces to hang out



BITESIZE

Some 60% of young people feel eating as a family has improved their health and wellbeing while in lockdown.



"When I have nothing to do I usually prepare myself food if I'm hungry. Since my parents are key workers, I feel like I should help out more with cooking."

"Food during this period allowed me to reconnect with members of my family; we have been cooking together and enjoying meals together. I'd love to continue doing it."



BITESIZE

A third of teens reported cooking more, although those from poorer families were stepping up to take responsibility for preparing meals for key worker single parents rather than cooking for enjoyment.



James Toop, CEO of Bite Back 2030, who commissioned the research, said: "If the prime minister is serious about tackling obesity, we must start with the health of young people. Those we have listened to have been clear – they want more opportunities to be healthy. Now is the time to act."

BEAT THE HEAT

TIGERS, elephants, sun bears and a whole host of other species have been filmed taking advantage of a jungle pool to beat the heat in Thailand.

Camera trap footage filmed over a month in Thailand's Huai Kha Khaeng Wildlife Sanctuary found a wide variety of species used the water hole – from large predators such as tigers, to smaller species of bird, like the jungle fowl. Conservationists are thrilled by the variety of species they filmed using the natural pool in the sanctuary, after spending years trying to protect and conserve the vast Western Forest Complex of national parks and sanctuaries in Thailand and Myanmar.

The project was a collaboration between the Wildlife Conservation Society and the Thai government, to protect the forest and to increase ranger patrols in the area. Tigers in particular have benefited, as the increased patrols have helped protect them from poachers and seen their numbers increase.



REEFS NEED PROTECTION

A NEW study has found that just 2.5% of the world's tropical coral reefs are officially protected by law.

Conservationists are concerned about the lack of protection for such important habitats and ecosystems around the world, particularly in areas where there is a lot of contact with people. They are urging governments and other organisations to make official marine protection areas a priority.

More than 500 million people around the world rely on reefs and the fish that live in them. If reefs aren't properly protected then it won't be long before the number of fish living there becomes dangerously low. The full study is published in the latest edition of the journal *Marine Policy*.



SEAHORSE SURPRISE



WOW!

A WOLF has been spotted in northern France for the first time in over 100 years. The animal was caught on CCTV wandering through the town of Londinières. A small number of wolves are known to live in France, but much further south and in the Alps.

A NEW species of pygmy seahorse has been discovered in South Africa.

The tiny seahorse is no bigger than a grain of rice and has a set of sharp-tipped spines on its back. It has been named the African or Sodwana Bay pygmy seahorse, after the region where it was found.

Researchers working in the area were surprised to find the species, as most of the other pygmy seahorse species are found more than 8,000 kilometres away in the southwestern Pacific Ocean.

Michael Markovina

Dr Richard Smith

Some of you may be going back to school and things will seem a bit different

We have looked at how schools can open in a safe way.



reducing the size of classes



keeping children in small “bubble” groups without mixing with others



having staggered break and lunch times, as well as drop-offs and pick-ups



more cleaning



reducing the use of shared items



schools using outdoor space as much as they can



not travelling to school on public transport if possible

All together >

www.gov.uk/coronavirus

THE BIG PICTURE



Lockhart Maclean

AFTER 48 days at sea, the crew of the Ocean Voyages Institute ship S/V Kwai successfully removed a record 93.4 tonnes of fishing nets and other plastic junk from the sea.

The operation was carried out in the part of the Pacific Ocean commonly known as the Great Pacific Garbage Patch, or North Pacific Subtropical Convergence Zone, to give it its official name. This area is the centre of what's known as a gyre, which is a circular current. The way the current moves leads to a build-up of rubbish in the middle, which can be targeted by clean-up expeditions like this one.

"The oceans can't wait for these nets and debris to break down into microplastics," said Mary Crowley, the founder of the Ocean Voyages Institute. "There is no doubt in my mind that our work is making the oceans healthier for the planet and safer for marine wildlife, as these nets will never again entangle or harm a whale, dolphin, turtle or reef."

SWEET AND SOUR

A European honeybee in its hive

IN recent years, it's become clear that many bee species are in trouble, due to the increasing effect that humans are having on the environment. As well as providing us with honey, bees (and other insects) also pollinate most of the crops that the world relies on.

Dr Martin Kunz is on the management committee of the International Bee Research Association (IBRA). He also keeps bees as a hobby, and he wrote this piece for us about the difficult challenges that these amazing creatures are faced with.

COLLECTING NECTAR

To produce 1kg of honey, honeybees must collect nectar from four million flowers. So, obviously we need a lot of flowering plants if we want honey. Someone suggested that each person in London should plant one flower – but those nine million blossoms would only provide nectar for 2.5kg of honey, which isn't enough, even though each blossom is visited multiple times. Bees need meadows full of flowers, and in particular they need trees: I don't think anyone has ever estimated the number of blossoms on a chestnut or linden tree.

But it's not only a question of quantity [amount]. In spring, of course, all those fields with yellow flowers (from rapeseed plants) provide a lot of nectar, but once they're gone most of the countryside is like a food desert for bees for the rest of the year.

The second problem with such a mono-diet (eating just one thing) is that it is unhealthy. Imagine that you were only fed cheese on toast, day in and day out, for weeks. Not only would it be boring, but the chances are that you'd also feel or even get sick. It's the same for bees: they need a variety of food. Bees even self-medicate [treat themselves with medicine]: if they have an upset stomach (it happens!), they know which plants to visit. Although bees living in urban areas may have a wider choice of flowers, there are still not enough of them.

It's estimated that there are around 5,000 bee colonies in London alone – and despite all the parks and gardens, there may simply not be enough food for them all.



These beehives are on the roof of a high-rise building in Manhattan, New York



Two European honeybees in the USA approach a stingy cactus

UNDERSTANDING BEES

And that's just one of the problems bees face. Like humans, when too many things go wrong and don't work, they get stressed and can fall ill, and they may even die. When all the bees in a hive die, it's called a colony collapse.

When we try to understand bees, it's important to look not at one individual bee, but at a whole colony. In the summertime there is one queen and up to 50,000 worker bees, which are all female and do all the work, including raising the young, cleaning and defending the colony, and foraging. There are also a couple of hundred drones, which are males whose only purpose is to mate with a queen. This colony, a so-called 'super organism', acts like one animal. When apple and other trees are flowering, known as nectar flow, bees store as much food as possible. They also try to feed and raise as many young bees as they can. A summer bee usually only lives for six weeks, so there is a constant renewal, both of individual bees and colonies.

Remember, a colony acts like a single animal – and it gives birth to a new one.

This is called swarming, and is very different from, say, a dog having a pup. You may have seen thousands of bees hanging from a branch – that is a swarm. What's interesting is that unlike humans, where the young generation usually moves out when finished with school and training, among bees it is the older bees that leave their hive. That way, they give the next generation a better chance to start the cycle all over again. A swarm only has two or three days in which to find a new home. After that, the honey they took with them in their stomachs runs out and they starve.

Increasingly, swarming bees find it hard to find suitable new homes. Before the human population became so large, bees had it much easier and could find an old tree with a nice hole, possibly made and left by a woodpecker. Nowadays, bees settle for gaps between wall insulation, for example. It's not good for them, and usually not good for the people living in that house either.