

**SATURDAY 14 MAY 2022****SAT 00:00 BBC News (w172ykq1b05k9bb)**

The latest five minute news bulletin from BBC World Service.

**SAT 00:06 The Real Story (w3ct33nv)**

North Korea spooks its neighbours

This week as North Korea continued to test new ballistic missile technology, a new president took charge in South Korea promising to take a harder line with the north. Yoon Suk-yeol used his inaugural speech to call on Kim Jong-un to pursue a genuine path to rid his country of nuclear weapons. If he does, Mr Yoon promised he'd present an "audacious plan" to boost the impoverished North's economy. Meanwhile in Japan, former Prime Minister Shinzo Abe is calling for his country to re-think its post-WW2 ban on nuclear weapons. As the only nation to have suffered a nuclear attack, public opinion strongly supports laws prohibiting nuclear weapons on Japanese soil. But some analysts now believe the increased military threat from North Korea and China - including the testing of hypersonic missiles that in theory will be harder to intercept - mean that not only should Japan begin permanently hosting American nuclear warheads, it should even consider developing a nuclear deterrent of its own.

Ritula Shah is joined by a panel of expert guests.  
Producers: Ellen Otzen and Paul Schuster.

**SAT 01:00 BBC News (w172ykq1b05kf2g)**

The latest five minute news bulletin from BBC World Service.

**SAT 01:06 World Business Report (w172yk18m4xs14h)**

First broadcast 14/05/2022 00:06 GMT

The latest business and finance news from around the world, on the BBC.

**SAT 01:30 BBC News Summary (w172ykqvrqs7sbv)**

The latest two minute news summary from BBC World Service.

**SAT 01:32 WorklifeIndia (w3ct3jcb)**

Social media perils for aspiring artists

Streaming is now the main growth driver for music revenues worldwide. In India, music streaming is estimated to cross \$870m by 2025. According to a recent study, Indians also listen to more music than the rest of the world - over 19 hours a week, compared to 18 hours globally. And nearly 67% of this music is consumed through social media sites or apps. With those kinds of figures - what kind of effect is this having on young artists, who are often told, told, "It's the future of music" or, "It's here to stay, so learn to work with it."

How does this affect their creativity, and how do they deal with the pressure to gain more followers on social media? We discuss the perils and pitfalls of social media for aspiring artists.

Presenter: Devina Gupta  
Contributors: Nikhil Chinapa, DJ, anchor, music festival curator; Chintan Kalra, producer, musician, co-founder - Indie Band Parikrama; Lekha Raman, fashion model, disc jockey

Photo: Watching a concert on a mobile phone Credit: Getty Images

**SAT 02:00 BBC News (w172ykq1b05kjtI)**

The latest five minute news bulletin from BBC World Service.

**SAT 02:06 The Newsroom (w172yl7nqdjjwFz)**

The world's Newsroom brings you global events as they happen

**SAT 02:30 BBC News Summary (w172ykqvrqs7x2z)**

The latest two minute news summary from BBC World Service.

**SAT 02:32 Stumped (w3ct370j)**

Brendon McCullum's England revolution?

Alison Mitchell, Jim Maxwell and Charu Sharma react to Brendon McCullum's appointment as England's new Test cricket coach. The former New Zealand captain has signed a four-year deal to succeed Chris Silverwood, who left his position in February.

The team speak to two-time World Cup winner Anya Shrubsole and find out whether the former England bowler is happy with her decision to retire from international cricket.

Plus we meet Luke Georgeson, the all-rounder who switched his

allegiance from New Zealand to Ireland before having a change of heart and switching back just two weeks later.

IMAGE: New Zealand cricketer Brendon McCullum rings the 5-minute bell before the start of play on day three of the 3rd Investec Test match between England and Sri Lanka at Lord's Cricket Ground. (Credit: Getty Images)

**SAT 03:00 BBC News (w172ykq1b05kknkq)**

The latest five minute news bulletin from BBC World Service.

**SAT 03:06 The Fifth Floor (w3ct37z4)**

Mariupol: City at the heart of war

The Ukrainian port city of Mariupol has been under attack by the Russians since the first day of the invasion on 24 February. It now lies in ruins, but still Ukrainian fighters are resisting in the Azovstal steelworks. Vitaliy Shevchenko, Russia editor of BBC Monitoring, tells us about the complex history and identity of Mariupol.

**Reporting Sri Lanka**

It's been a week of violent unrest in Sri Lanka, where peaceful protests in the capital turned into riots on Monday after the resignation of prime minister Mahinda Rajapaksa. For two members of the BBC Sinhala team, it's a doubly difficult story, having moved from Colombo to Delhi. Editor Ishara Danasekara and her colleague Amanda Abeysooriya tell us about the challenges of reporting from a distance.

**South Korea's hijabi influencer**

Sabrina is a young hijab-wearing Malaysian Muslim who loves to dance to K-pop. When she moved to South Korea, she opened a YouTube channel and became a popular influencer. However, not all responses have been positive, as BBC Korean's Bugyeong Jung found out.

**My Childhood, My Country**

A remarkable documentary which follows the life of a young Afghan from the age of 7 to 27 has just won a BAFTA award for Shoab Sharifi, who runs the Kabul office of the BBC's international charity, BBC Media Action. It's called My Childhood, My Country, and Shoab tells us how he first met his star, Mir Hussain, then recorded his life from child to adult.

Presenter: Faranak Amidi

Producer: Sue Waldram

(Photo: Theatre building destroyed in the Ukraine-Russia conflict in Mariupol, April 25, 2022. Credit: Reuters/Alexander Ermochenko)

**SAT 03:50 Witness History (w3ct3bwd)**

The war in Transnistria

With speculation mounting that President Putin might mount an attack on Moldova, we're going back to the early 1990s and a war between the Moldovans and Russian-backed separatists in the disputed region of Transnistria. Several hundred people died in a conflict which ended in a stalemate in 1992. Matt Pintus speaks to former journalist and Moldovan defence minister, Viorel Cibotaru.

PHOTO: Russian-speaking Transnistrian fighters during the war (Getty Images)

**SAT 04:00 BBC News (w172ykq1b05ks9v)**

The latest five minute news bulletin from BBC World Service.

**SAT 04:06 The Real Story (w3ct33nv)**

[Repeat of broadcast at 00:06 today]

**SAT 05:00 BBC News (w172ykq1b05kx1z)**

The latest five minute news bulletin from BBC World Service.

**SAT 05:06 The Newsroom (w172yl7nqdjk7pc)**

The world's Newsroom brings you global events as they happen

**SAT 05:30 BBC News Summary (w172ykqvrqs88bc)**

The latest two minute news summary from BBC World Service.

**SAT 05:32 Trending (w3ct3bqs)**

Gaming Brazil's election

Brazilian president Jair Bolsonaro has enjoyed a particularly close relationship with the gaming community. They were one of the groups he relied on to get elected in 2018 and he has since rewarded them by lowering taxes on video games consoles.

The country's gaming industry is unique – forged by a combination of strict import laws under military rule, homegrown talent and later, high prices which kept the world of gaming firmly in the hands of the rich and privileged.

Brazilian gamers were drawn to President Bolsonaro's straight talk. But there are hints that things might be changing. His handling of the coronavirus pandemic has caused Bolsonaro's approval rates to fall across society – and gamers are no exception. Some high profile gaming supporters have turned their back on the president. Plus the industry's demographics are rapidly shifting, and not in Bolsonaro's favour. So how are video game developers visualising the 2022 election? And can President Bolsonaro still rely on the support of the button bashers to defeat his arch enemy Lula?

Presenter: Jonathan Griffin

Reporter: Juliana Gragnani

(Image: A still from a satirical Brazilian game which pits politicians against each other in a vicious fight. Credit: Políticos Memes Kombato)

**SAT 05:50 More or Less (w3ct3k4I)**

Did the WHO get some of its excess death estimates wrong?

The World Health Organisation recently released some new estimates of the global death toll of the pandemic. But the figures for a few countries have caused controversy. Tim Harford speaks to Professor Jon Wakefield, who worked on the analysis - and Indian data journalist Rukmini S about the debate that's erupted in India over the figures.

**SAT 06:00 BBC News (w172ykq1b05I0t3)**

The latest five minute news bulletin from BBC World Service.

**SAT 06:06 Weekend (w172ykw20d5c5b)**

North Korea announces more deaths from Covid

Pyongyang has reported 21 more deaths from Covid and a daily increase of more than 170,000 people showing symptoms.

Also, there's been international criticism of the use of force by Israeli police at the funeral of the Al Jazeera reporter Shireen Abu Aqla, whose killing in the occupied West Bank has caused a surge of anger. We hear from her brother.

Plus, the U.S. Special Envoy for Afghan Women, Girls, and Human Rights tells us why it is in the Taliban's interests to improve women's rights.

Joining Anna Holligan to discuss these and other issues are Joana Cook, assistant professor of Terrorism and Political Violence at the Institute of Security and Global Affairs, Leiden University; and Michael Peel, executive editor at Nikkei Asia based in Tokyo and long term journalist for the Financial Times.

(Image: People wearing protective face masks walk in front of Pyongyang Station. Credit: Reuters)

**SAT 07:00 BBC News (w172ykq1b05I4k7)**

The latest five minute news bulletin from BBC World Service.

**SAT 07:06 Weekend (w172ykw20d5gvg)**

US: Improving women's rights in the Taliban's interests

The US Special Envoy for Afghan Women, Girls, and Human Rights tells us why it's in the Taliban's interests to improve women's rights.

Also, what do Sri Lankans make of the stark warning from their new Prime Minister about the state of the economy?

Joining Anna Holligan to discuss these and other issues are Joana Cook, assistant professor of Terrorism and Political Violence at the Institute of Security and Global Affairs, Leiden University; and Michael Peel, executive editor at Nikkei Asia, based in Tokyo and long-term journalist for the Financial Times.

(Image: Afghan women in Kabul, Afghanistan. Credit: EPA)

**SAT 08:00 BBC News (w172ykq1b05I89c)**

The latest five minute news bulletin from BBC World Service.

**SAT 08:06 Weekend (w172ykw20d5InI)**

Has Russia withdrawn from Ukrainian second city?

US military analysts say Russian forces appear to have fully withdrawn from positions around Ukraine's second city, Kharkiv.

Plus, there's been international criticism of the use of force by Israeli police at the funeral of the Al Jazeera reporter Shireen Abu Aqla, whose killing in the occupied West Bank has caused a surge of anger. We hear from a fellow Palestinian journalist on why she was an inspiration to so many.

Joining Anna Holligan to discuss these and other issues are Joana Cook, assistant professor of Terrorism and Political Violence at the Institute of Security and Global Affairs, Leiden University; and Michael Peel, executive editor at Nikkei Asia, based in Tokyo and long-term journalist for the Financial Times.

(Images: A local woman with cats walk past a farm building in the village of Mala Rohan, near Kharkiv, Ukraine. Credit: EPA)

**SAT 08:30 BBC News Summary (w172yqkvrqs8mkr)**  
The latest two minute news summary from BBC World Service.

**SAT 08:32 The Conversation (w3ct37ls)**  
Women in the world of animation

From the first moving drawings that appeared on screens back in the 1930s to the highly imaginative, emotionally resonant filmmaking of today – animation has come a long way. It is no longer considered a pleasant cinematic distraction for kids. In fact, some of the boldest, most creative and slyly subversive filmmaking can be found in animation. Kim Chakanetsa speaks to two women responsible for bringing animated characters to life.

María Cecilia Botero is an actor from Colombia whose career spans five decades. She has experience in everything from performing musical theater, to being a news anchor, to starring in popular telenovelas, to dubbing commercials and most recently voicing the character of the Abuela in the Oscar-Winning Disney film Encanto.

Signe Baumann is a Latvian animator based in Brooklyn. Her first of many short stories was published in a local newspaper when she was 14. She went on to illustrate children's books and create sets for puppet theaters. Since she moved to the United States to further pursue animation, Signe has written, directed and animated 15 shorts and two animated films. Her work has been showcased at over 300 film festivals. She uses animation to confront difficult, adult topics, like "Rocks in My Pockets", which she also voiced, which covers the 100 year history of her family in Latvia.

Produced by Emily Naylor.

(Image: (L), María Cecilia Botero, courtesy of María Cecilia Botero. (R), Signe Baumann, courtesy of Signe Baumann.)

**SAT 09:00 BBC News (w172yqk1b051d1h)**  
The latest five minute news bulletin from BBC World Service.

**SAT 09:06 BBC OS Conversations (w3ct417d)**  
Abortion in the US

Abortion is a deeply divisive issue in the United States that spans the law, religion and women's rights. It has been a legal right for almost 50 years. Now, the Supreme Court – the top court in the country – is expected to overturn the law and rule that abortions can be banned.

It's put abortion back towards the top of the political debate and we reflect some of the conversations taking place among those affected.

Two women share their experiences and personal reasons for terminating their pregnancies, including one that resulted from sexual assault.

"I felt like the deepest despair ever in my life," said Samantha. "Seeing that positive pregnancy test, I remember balling up the shower curtain because I was in the bathroom screaming, and biting into the shower curtain so that no one could hear."

Hosts Ben James and Karnie Sharp also introduce a conversation between two doctors, both women, who work at clinics that provide abortions. They discuss how they feel about performing abortions, including when one of them was pregnant with her own child; plus how they deal with any moral judgement that may surround their actions. The programme also includes messages from women who welcome a potential abortion ban.

Please be aware, the conversations discuss matters that some may find distressing.

(Photo: Pro-choice and anti-abortion demonstrators confront during a protest outside the US Supreme Court. Credit: Reuters/Michael A McCoy)

**SAT 09:30 BBC News Summary (w172yqkvrqs8r9w)**  
The latest two minute news summary from BBC World Service.

**SAT 09:32 Hidden Sport (w3ct41d5)**  
Switch

Kim Tserkezis meets Danny Hibbert, the mastermind behind Switch, a sport of sports consisting of football, basketball, volleyball, netball and handball. She learns how the game is crossing generational and cultural divides in White City, a fast-changing area of west London, and giving opportunities to many, where more established sports are failing. Through speaking to those who Switch has impacted, Kim comes to understand how important Switch, and Danny, are to this diverse community.

**SAT 09:50 Over to You (w3ct35s4)**  
New podcast Lives Less Ordinary

We find out about the launch of a new podcast called Lives Less Ordinary from the team who produce Outlook and ask what lies ahead? But some listeners are unhappy that this new series means the end of Outlook's own podcast.

Plus the documentary The Grand Egyptian Museum - a listener complains it sounds like it was scripted by the Egyptian Tourism Board and was insufficiently critical.

Presenter: Rajan Datar  
Producer: Howard Shannon

**SAT 10:00 BBC News (w172yqk1b051hsm)**  
The latest five minute news bulletin from BBC World Service.

**SAT 10:06 Sportshour (w172yg8h3fbr4jh)**  
FA Cup final bonanza

We preview the Men's and Women's FA Cup final taking place at Wembley this weekend.

We'll speak to the BBC's Ian Dennis, get the full match day experience on board the Liverpool supporters coach and revisit some of the classic FA Cup team songs.

Then on Sunday it's the women's final. The competition has come a long way in a relatively short period of time. This is only the seventh year in its more than 50 year history the game has been played at Wembley. The progress of the women's game is in no small part down to women like Patricia Gregory, founder of the Women's FA and Lorraine Hoey captain of the Fulham's 1985 cup winners. We bring them together for their thoughts.

After Covid caused its postponement, the biggest sporting event for the deaf community, the Deaflympics, have been taking place in Brazil this week. Deaf sport isn't part of the Paralympic Games and as such hasn't seen the same kind of growth in interest, publicity and funding for its athletes, many of whom are struggling with the financial burden. We speak to British swimmer Nathan Young and CEO of the Organising Committee Richard Ewald.

The classically French sport of Pétanque is hosting its world championship, we drop into see what all the fuss is about!

Image: Juergen Klopp, manager of Liverpool (L) and Thomas Tuchel, manager of Chelsea. Chelsea and Liverpool meet in the Men's FA Cup Final on Saturday at Wembley CREDIT: LEFT IMAGE (Photo by Laurence Griffiths/Getty Images) CENTER IMAGE (Photo by Alex Pantling/Getty Images) RIGHT IMAGE (Photo by Catherine Ivill/Getty Images)

**SAT 11:00 BBC News (w172yqk1b051mjr)**  
The latest five minute news bulletin from BBC World Service.

**SAT 11:06 The Newsroom (w172yl7nqjzk54)**  
The world's Newsroom brings you global events as they happen

**SAT 11:30 BBC News Summary (w172yqkvrqs8t4)**  
The latest two minute news summary from BBC World Service.

**SAT 11:32 Unspun World with John Simpson (w3ct42bz)**  
Russia, mercenaries and the Lebanese elections

BBC world affairs editor John Simpson explores how Russians feel about the war, what Russian mercenaries are doing in Mali, and the economic crisis looming large over Lebanon's elections. Joined by the BBC's unparalleled range of experts, John provides an unvarnished version of the week's major global news stories.

**SAT 12:00 BBC News (w172yqk1b051r8w)**  
The latest five minute news bulletin from BBC World Service.

**SAT 12:06 The Documentary (w3ct41wd)**  
Billionaire ball game

James Montague, award-winning author of the The Billionaire's Club, tells the story of how the super-rich bought English football and Chelsea FC became a sanctioned asset. From Putin's oligarchs to hyper-capitalist Americans and oil-rich Middle Eastern royal families, James explores the concerns, crimes and crises that large waves of cash have brought to the home of the beautiful game.

**SAT 13:00 BBC News (w172yqk1b051w10)**  
The latest five minute news bulletin from BBC World Service.

**SAT 13:06 Newshour (w172yfbf5ypdz9)**

North Korea's rapidly spreading Covid-19 outbreak a "great disaster"

North Korea's rapidly spreading Covid-19 outbreak is a "great disaster" for the country, its leader Kim Jong-un has said, according to state media. Will he accept vaccines from South Korea?

Also in the programme: we speak to a Ukrainian media boss on the challenges of reporting on a war in your own country; and India bans wheat exports one month after promising to feed the world.

(Photo: North Korean leader Kim Jong-un convenes a Covid-19 response meeting on 12 May. Credit: EPA)

**SAT 14:00 BBC News (w172yqk1b051z4)**  
The latest five minute news bulletin from BBC World Service.

**SAT 14:06 World Questions (w3ct3hnp)**  
Germany

The war in Ukraine has proved a turning point for German policy makers who have pledged to increase defence spending and wean themselves off their dependence on Russian gas and oil. But at what cost to the German public? How deep is the new consensus in Berlin? How will Germany face these new challenges in foreign policy – and energy and inflation problems at home? German politicians and opinion formers take questions from a live audience at Berlin's Humboldt University in a debate chaired by Jonny Dymond.

The panel:  
Nils Schmid: SPD MP and foreign affairs spokesperson  
Johann Wadepuhl: CDU MP and member of the Committee on Foreign Affairs  
Daniela Schwarzer: Political scientist and Open Society Executive Director for Europe  
Franziska Brantner: Green Party MP and Parliamentary State Secretary in the Ministry of Economic Affairs

BBC World Questions is a series of international events created in partnership with the British Council, which connects the UK and the world through arts, culture, education and the English language.

Producer: Helen Towner  
Sound Engineers: Kate Barker and Chris Weightman

(Photo: Brandenburg Gate, Berlin. Credit: Sylvain Sonnet/Getty Images)

**SAT 15:00 BBC News (w172yqk1b05m3j8)**  
The latest five minute news bulletin from BBC World Service.

**SAT 15:06 BBC OS Conversations (w3ct417d)**  
[Repeat of broadcast at 09:06 today]

**SAT 15:30 BBC News Summary (w172yqkvrqs9gsn)**  
The latest two minute news summary from BBC World Service.

**SAT 15:32 Trending (w3ct3bqs)**  
[Repeat of broadcast at 05:32 today]

**SAT 15:50 Sporting Witness (w3ct36fg)**  
The footballer trapped in Syria

Olaniyi Gideon is a professional footballer, who had played in the UAE and had trials for clubs in the UK; his efforts to keep his dream alive found him playing for a Syrian club in 2011

when the country descended into civil war. He tells Bukky Fadipe about the fraught escape he was forced to pull off after the club he was playing for abandoned him and the other players who weren't Syrians. The programme is a Whistledown Production.

PHOTO: Olamiyi Gideon, with the ball, in a team phot taken in Syria (personal collection)

**SAT 16:00 BBC News (w172ykq1b05m78d)**  
The latest five minute news bulletin from BBC World Service.

**SAT 16:06 Sportsworld (w172ygpjpcmx95)**  
Live Sporting Action

Lee James presents live commentary of the FA Cup Final between Chelsea and Liverpool at Wembley Stadium. Lee will be alongside Scott Minto, an FA Cup winner with Chelsea in 1997, and the former Liverpool goalkeeper Brad Friedel.

We'll also preview the Women's FA Cup Final between Chelsea and Manchester City.

Image: In this composite image a comparison has been made between Juergen Klopp, Manager of Liverpool (L) and Thomas Tuchel, Manager of Chelsea. Chelsea and Liverpool meet in the Men's FA Cup Final on May 14, 2022 at Wembley Stadium in London, England. \*\*\*LEFT IMAGE\*\*\* (Photo by Laurence Griffiths/Getty Images) \*\*\*CENTER IMAGE\*\*\* (Photo by Alex Pantling/Getty Images) \*\*\*RIGHT IMAGE\*\*\* (Photo by Catherine Ivill/Getty Images)

**SAT 20:00 BBC News (w172ykq1b05mq7x)**  
The latest five minute news bulletin from BBC World Service.

**SAT 20:06 The Arts Hour (w3ct3902)**  
Directors Barry Jenkins and Sian Heder

Two extended interviews by Nikki Bedi with two astonishingly talented American film-makers, both of whom have won the Best Picture Oscar.

Firstly the creative visionary behind the Oscar winning film Moonlight and the television series The Underground Railroad, director Barry Jenkins. And the pioneering force behind this year's Best Picture Oscar for CODA, writer and director Sian Heder.

The Arts Hour previously went on tour to the United States, and discussed diversity, equality and inclusion in film making. In this episode, you can hear more from those conversations from the Redcat Theatre in Los Angeles.

Producers: Paul Waters, Nicki Paxman and Oliver Jones

(Photo: Barry Jenkins on stage at REDCAT in Los Angeles. Credit: James V. Evers)

**SAT 21:00 BBC News (w172ykq1b05mv01)**  
The latest five minute news bulletin from BBC World Service.

**SAT 21:06 Newshour (w172yfbf5yqcyb)**  
People returning to Kharkiv, says mayor

The mayor of Kharkiv in north-eastern Ukraine has told the BBC that the battle for the city has been won and that people are starting to return. Ihor Terekhov said invading Russian troops had withdrawn towards the border. We speak to one Ukrainian MP from the city who tells us what Kharkiv looks like now.

Also in the programme: North Korea's leader Kim Jong-un says the Covid outbreak is the greatest disaster his country has ever faced; and we go to the final of Eurovision to get a taste of the performances which have taken place.

(Photo: Ukrainian servicemen ride a motorcycle near Kharkiv. Credit: Reuters).

**SAT 22:00 BBC News (w172ykq1b05myr5)**  
The latest five minute news bulletin from BBC World Service.

**SAT 22:06 Music Life (w3ct30jt)**  
Eurovision 2022 with Cornelia Jakobs, MARO, Alexandra Rotan (KEiINO), SuRie and Dami Im

Two of this year's Eurovision hopefuls, Cornelia Jakobs and MARO, meet three former contestants - SuRie, Dami Im and KEiINO's Alexandra Rotan - to discuss how writing music in rooms with strangers is like speed dating, the expectation that fans have of their sound, why there's no formula to win the

competition, and the strength in simplicity.

Susanna Marie Cork, better known as SuRie, was the 2018 UK entry for the competition. Dance-pop singer-songwriter Alexandra Rotan is a member of the super group KEiINO, who represented Norway in 2019. Stockholm-based singer-songwriter Cornelia Jakobs is representing Sweden in this year's Eurovision, taking place in Turin, Italy, while MARO is representing Portugal. Korean-Australian pop singer-songwriter and multi-instrumentalist Dami Im came second in the 2016 competition.

**SAT 23:00 BBC News (w172ykq1b05n2h9)**  
The latest five minute news bulletin from BBC World Service.

**SAT 23:06 The Newsroom (w172yrwsvxc2jw)**  
The world's Newsroom brings you global events as they happen

**SAT 23:20 Sports News (w172ygh1n8595jl)**  
BBC Sport brings you all the latest stories and results from around the world.

**SAT 23:30 BBC News Summary (w172yqvrqsbfpr)**  
The latest two minute news summary from BBC World Service.

**SAT 23:32 The Cultural Frontline (w3ct37re)**  
The art of memory

Lola Arias is a well-known and influential Latin American theatre director, writer and filmmaker. Her powerful stage pieces are created from real life testimony. She gathers material for these works by talking to and workshoping with people who have witnessed, or been part of a particular, sometimes traumatic, shared experience. These people then become her actors, performing their lives in the theatre. She tells Tina Daheley about her working methods and her works including 'Minefield', where she brought together British and Argentinian veterans from the 1982 Falklands war, 'The Day I Was Born' which included people from different political sides during the Chilean dictatorship of Augusto Pinochet and her latest piece, Lengua Madre, Mother Tongue, exploring motherhood in the 21st Century.

This year Kaunas, Lithuania's second largest city, is one of the three European Capitals of Culture 2022. It's a place with a troubled past and one the topics being explored during this year of Culture is its forgotten or suppressed history. One of the artists who's exhibiting there is William Kentridge. His family emigrated to South Africa from Lithuania more than a century ago to escape antisemitism and the pogroms. For years, the internationally acclaimed artist admits he was reluctant to visit the land of his ancestors. Kentridge, who combines his trademark charcoal drawings with animation and sculpture, is well known for tackling difficult subjects such as racial and financial inequality. Lucy Ash met him at the National Art Museum in Kaunas at his exhibition called That Which We Do Not Remember.

Sophie Jai's debut novel Wild Fires is set on the Caribbean island of Trinidad. When her main character Cassandra returns home from abroad for the funeral of her cousin Chevy, she's confronted by her intergenerational family, all living in different parts of the same house, together but separate, and the family secrets and hidden memories that have dominated their lives for decades. Sophie Jai herself was born and spent her early childhood in Trinidad until moving to Canada and she explains what drew her back to writing about Trinidad and the memories of her childhood.

(Photo: An image from Lola Arias' Minefield. Credit: Tristram Kenton)

## SUNDAY 15 MAY 2022

**SUN 00:00 BBC News (w172ykq1b05n67f)**  
The latest five minute news bulletin from BBC World Service.

**SUN 00:06 BBC OS Conversations (w3ct417d)**  
[Repeat of broadcast at 09:06 on Saturday]

**SUN 00:30 BBC News Summary (w172yqvrqsbkht)**  
The latest two minute news summary from BBC World Service.

**SUN 00:32 Trending (w3ct3bqs)**  
[Repeat of broadcast at 05:32 on Saturday]

**SUN 00:50 More or Less (w3ct3k4l)**  
[Repeat of broadcast at 05:50 on Saturday]

**SUN 01:00 BBC News (w172ykq1b05n9zk)**  
The latest five minute news bulletin from BBC World Service.

**SUN 01:06 The Science Hour (w3ct39z3)**  
Portrait of the monster black hole at our galaxy's heart

The heaviest thing in the Galaxy has now been imaged by the biggest telescope on Earth. This is Sagittarius A\*, the supermassive black hole at the centre of our Galaxy – a gas and star-consuming object, a 4 million times the mass of the Sun. The Event Horizon Telescope is not one device but a consortium of radio telescopes ranging from the South Pole to the Arctic Circle. Their combined data allowed astronomers to focus in on this extreme object for the first time. Astronomer Ziri Younsi from University College London talks to Roland Pease about the orange doughnut image causing all the excitement.

Also in the programme...

Climatologist Chris Funk talks about the role of La Niña and climate change in the record-breaking two year drought that continues to threaten the lives and livelihoods of millions of people in East Africa.

Was a pig virus to blame for the death of the first patient to receive a pig heart transplant? We talk to the surgeon and scientist at the University of Maryland School of Medicine who led the historic animal to human transplant operation this year.

How easy will it be to grow plants in lunar soil on future moon bases? Plant biologist Anna Lisa Paul has been testing the question in her lab at the University of Florida, Gainesville, with cress seeds and lunar regolith collected by the Apollo missions.

And....

Does photographic memory exist?

Most people are great at remembering key points from important events in their lives, while the finer details - such as the colour of the table cloth in your favourite restaurant or the song playing on the radio while you brushed your teeth - are forgotten.

But some people seem to have the power to remember events, documents or landscapes with almost perfect recall, which is widely referred to as having a photographic memory. CrowdScience listeners Tracy and Michael want to know if photographic memory actually exists and if not, what are the memory processes that allow people to remember certain details so much better than others?

Putting her own memory skills to the test along with the presenter Marnie Chesterton sets out to investigate just what's happening inside our brains when we use our memories, the importance of being able to forget and why some people have better memories than others.

Photo: First image of Sgr A\*, the supermassive black hole at the centre of our galaxy  
Credit: EHT Collaboration, Southern European Observatory

Presenter: Roland Pease and Marnie Chesterton  
Producer: Andrew Luck-Baker and Hannah Fisher

**SUN 02:00 BBC News (w172ykq1b05nfqp)**  
The latest five minute news bulletin from BBC World Service.

**SUN 02:06 The Newsroom (w172y1nqjmsc2)**  
The world's Newsroom brings you global events as they happen

**SUN 02:30 BBC News Summary (w172yqvrqsbt02)**  
The latest two minute news summary from BBC World Service.

**SUN 02:32 Health Check (w3ct32wb)**  
New trial results of a fourth Covid booster

Brand new results of a fourth Covid booster trial, with a mix and match approach including half doses, reveals good news for global vaccine rollout. BBC Health and Science correspondent James Gallagher explains.

Plus evidence from Ohio where Professor Ihuoma Eneli's new paper shows how weight gain increased markedly in low-income US children and teenagers during early Covid-19.

And the science of dreams, Claudia Hammond speaks to Brazilian neuroscientist Sidarta Ribeiro about his new wide ranging book The Oracle of Night.

Presenter: Claudia Hammond

Producer: Erika Wright

(Picture: A patient who has received a fourth Covid-19 vaccination in Rieti, Italy. Photo credit: Riccardo Fabi/NurPhoto/Getty Images.)

**SUN 03:00 BBC News (w172ykq1b05nkgt)**

The latest five minute news bulletin from BBC World Service.

**SUN 03:06 The Documentary (w3ct41wd)**

[Repeat of broadcast at 12:06 on Saturday]

**SUN 04:00 BBC News (w172ykq1b05np6y)**

The latest five minute news bulletin from BBC World Service.

**SUN 04:06 From Our Own Correspondent (w3ct327b)**

Living through Shanghai's lockdown

Pascale Harter introduces reportage and analysis from journalists and writers in China, Switzerland, Finland and Jamaica.

More than 373 million people across China are currently living under some form of Covid lockdown restrictions. In Shanghai – usually a frenetic megacity with more than 25 million residents – the rules have just been tightened again. Work, play and shopping routines have all been turned upside down, and nobody is sure when it might all end. Rebecca Kanthor describes how her family, friends and neighbours are waiting it out.

Across Europe, there are countries, communities, and private citizens opening their doors to Ukrainians escaping the war. But critics have pointed to some striking contrasts between the way Ukrainian refugees have been treated, and how the authorities deal with people fleeing violence elsewhere in the world. Imogen Foulkes reports from Switzerland, where questions are being asked about what some are calling a two-tier system.

Finland has history with Russia: plenty of it, including past battles, invasions and occupations. As the Finnish government and electorate considered whether the war in Ukraine now makes joining NATO - after decades of official neutrality - a wise strategic decision, Allan Little went back into the archives and Finnish memories of previous conflicts.

After decades of official prohibition, Jamaica partially decriminalised the growing, consumption and sale of marijuana in 2015. The cannabis plant has had a long – and controversial – part to play in the island's history and culture. So how has the change in policy worked out for Jamaicans – especially the small-scale independent cannabis growers? Rachel Wright heard that some feel the new rules are edging them out of a lucrative market.

Producer: Polly Hope

Production Co-Ordinator: Gemma Ashman

(Image: A woman passes supplies over a fence during the Covid-19 lockdown in Shanghai. Credit: EPA/Alex Plavevski)

**SUN 04:30 BBC News Summary (w172ykqvrqsc1hb)**

The latest two minute news summary from BBC World Service.

**SUN 04:32 The Cultural Frontline (w3ct37rc)**

[Repeat of broadcast at 23:32 on Saturday]

**SUN 05:00 BBC News (w172ykq1b05nsz2)**

The latest five minute news bulletin from BBC World Service.

**SUN 05:06 The Newsroom (w172y17nqdjn4lg)**

The world's Newsroom brings you global events as they happen

**SUN 05:30 BBC News Summary (w172ykqvrqsc57g)**

The latest two minute news summary from BBC World Service.

**SUN 05:32 The Documentary (w3ct42d5)**

Grenada: Confronting the past

BBC World News anchor Laura Trevelyan discovered her family's slave owning past only after the University College London database of slave ownership in the British Caribbean was published in 2013. Back in the 18th Century, the Trevelyan family were known as absentee slave owners on Grenada. The family never set foot on the island, but owned hundreds of slaves and profited for years from the sale of sugar harvested from five different sugar cane plantations.

To try and learn more about the legacy of slavery on Grenada

and her family's involvement in the slave trade, Laura Trevelyan and her producer Koralie Barrau go to Grenada. Koralie is descended from slaves on the Caribbean island of Haiti, so this was an intense trip for her, personally and professionally. Laura and Koralie visit the plantations, and learn about how slaves were brutalised and tortured. They are guided by the historian and administrator at the University of the West Indies, Dr Nicole Phillip Dowe, and the Grenadian historical novelist DC Campbell.

Grenada's national commission on reparations for slavery has begun to meet and debate what reparations means. Laura interviews the chair of Grenada's reparations commission, Arley Gill, to find out about the reparations Grenada is seeking from the former colonial powers of France and Britain.

Finally, Laura tries to find the ancestors of slaves once owned by her family - a journey which takes her to the heart of Grenada's capital St George's.

Presenter: Laura Trevelyan

Producer: Koralie Barrau

(Photo: Hands holding iron shackles. Credit: Mixel Inc)

**SUN 06:00 BBC News (w172ykq1b05nxq6)**

The latest five minute news bulletin from BBC World Service.

**SUN 06:06 Weekend (w172ykw20d882f)**

Ten people dead in New York state shooting

An 18-year-old white American has been charged with first degree murder after he killed 10 people in what the FBI says appears to have been a racially-motivated hate crime.

Also, President Zelensky has vowed to try to stage next year's Eurovision Song contest in Ukraine after the victory of Kalush Orchestra in this year's event. At the ceremony, there was a plea for international help from the band.

Plus, a fresh look at African photography.

Joining Anna Holligan to discuss these and other stories are Manmit Bhabra, a sociologist and policy fellow at the London School of Economics, and Moya Lothian-McLean, a journalist and columnist specialising in politics and digital culture based in London.

(Image: New York City Mayor Eric Adams speaks during a news conference about recent shootings of homeless people in New York and Washington. Credit: Reuters)

**SUN 07:00 BBC News (w172ykq1b05p1gb)**

The latest five minute news bulletin from BBC World Service.

**SUN 07:06 Weekend (w172ykw20d8ctk)**

Ukraine triumphs at the Eurovision Song Contest

President Zelensky says he hopes next year's competition will take place in Ukraine. We have reaction.

Also, Anna Holligan takes a bike ride through Central London to assess just how safe the city is for cyclists.

Joining Anna Holligan to discuss these and other stories are Manmit Bhabra, a sociologist and policy fellow at the London School of Economics, and Moya Lothian-McLean, a journalist and columnist specialising in politics and digital culture based in London.

(Image: Kalush Orchestra of Ukraine, winners of the Eurovision Song Contest in Turin, Italy. Credit: Nderim Kaceli/fpa-agency.net/REX/Shutterstock (12940500b))

**SUN 08:00 BBC News (w172ykq1b05p56g)**

The latest five minute news bulletin from BBC World Service.

**SUN 08:06 Weekend (w172ykw20d8hkp)**

Will Sweden join Nato?

Sweden's ruling Social Democrats are deciding today whether the country should join Nato, but not everyone is convinced. We speak to Ali Esbati, a Swedish MP and Head of Fiscal Policy for the Left Party, which has been opposed to joining Nato.

Also, President Zelensky has promised to try to stage next year's Eurovision Song contest in Ukraine after the victory of Kalush Orchestra in this year's event. At the ceremony, there was a plea for international help from the band.

Joining Anna Holligan to discuss these and other stories are Manmit Bhabra, a sociologist and policy fellow at the London

School of Economics, and Moya Lothian-McLean, a journalist and columnist specialising in politics and digital culture based in London.

(Image: Protesters at a demonstration against NATO membership outside the ruling Social Democrats party's office in Stockholm, Sweden. Credit: TT News Agency/Alamy)

**SUN 08:30 BBC News Summary (w172ykqvrqscjgy)**

The latest two minute news summary from BBC World Service.

**SUN 08:32 The Food Chain (w3ct38ms)**

The problem with wheat

Wheat is one of the most important grains worldwide: you'll find it in bread, biscuits, pasta, sauces, sweets and more besides. Indeed, take wheat products off supermarket shelves and they would look rather bare. But recent global events – not least the war in Ukraine - have caused crop prices to soar.

Ruth Alexander charts how a humble grass grown in the Fertile Crescent became a commodity traded worldwide, and she explores whether we have become too reliant on this "mega crop" for our food supplies – and what alternatives there might be. She talks to Cathy Zabinski, professor of plant and soil ecology at Montana State University, US; Frank Uekotter, professor of environmental humanities at the University of Birmingham, UK; and Augustine Sensie Bangura, CEO of Sierra Agri Foods, Sierra Leone.

If you would like to get in touch with the show, please email: [thefoodchain@bbc.co.uk](mailto:thefoodchain@bbc.co.uk)

(Picture: An ear of wheat blowing in the wind. Credit: Getty Images/BBC)

**SUN 09:00 BBC News (w172ykq1b05p8yl)**

The latest five minute news bulletin from BBC World Service.

**SUN 09:06 From Our Own Correspondent (w3ct327b)**

[Repeat of broadcast at 04:06 today]

**SUN 09:30 BBC News Summary (w172ykqvrqscn6z)**

The latest two minute news summary from BBC World Service.

**SUN 09:32 Outlook (w3ct41dd)**

Twenty-three years longing to find my mum

When war broke out in Somalia in the 1990s, Omar Mohamed's dad was killed and he was separated from his mum. Omar, who was only four at that time, picked up his disabled younger brother Hassan and started running. The brothers eventually ended up in Kenya's vast Dadaab refugee camp - the biggest refugee camp in Africa. For years, they never stopped looking for their mother. Until one day, rumours spread around the camp that a woman was looking for them. Could this stranger be Omar and Hassan's mum?

Omar's extraordinary story was turned into a graphic novel called *When Stars Are Scattered*. Omar also set up his own charity called *Refugee Strong*. He was speaking to Jo Fidgen in July 2020.

Get in touch: [outlook@bbc.com](mailto:outlook@bbc.com)

Presenter: Jo Fidgen

Producer: Katy Takatsuki

(Photo: Omar Mohamed. Credit: Patrick Blain)

**SUN 10:00 BBC News (w172ykq1b05pdpq)**

The latest five minute news bulletin from BBC World Service.

**SUN 10:06 People Fixing The World (w3ct3j29)**

Robots fixing sewers

Robots that navigate sewer pipes are being used to find leaks and blockages in an ancient water system.

They're being put to work in Pune, India, to access dangerous and noxious spots that otherwise would be checked by people.

The sewage systems are more than 100 years old and the maps have been lost or are just outdated. So the robots are being used to update the maps, which should eventually lead to less leaks and so less contamination in the water.

But the machines also replace manual work that is done by some of the poorest members of Indian society. We explore what it will mean for their wellbeing and livelihoods.

Presenter: Myra Anubi  
Reporter: Chhavi Sachdev  
Executive producer: Tom Colls  
Editor: Penny Murphy

Image: The sewer robot in Pune

**SUN 10:30 BBC News Summary (w172ykqvrqscrz3)**  
The latest two minute news summary from BBC World Service.

**SUN 10:32 Heart and Soul (w3ct4236)**  
Kenya's last great Laibon

In traditional Maasai culture one of the central figures of the community is the laibon. A laibon is a person who has been gifted with the power to see the future. They are not really a fortune teller and they are certainly not a witch doctor. They are more like a seer, but some also have the power to cure illnesses. A laibon is the one who advises the community as a whole on the best course of action to take in a given situation. For example, they can use their powers to say where the community's cattle should be taken in order to find better grazing when there's a drought. They are the ones who can pronounce when the time is right for important ceremonies. Today hardly any laibon remain.

There is still one though. Called Mokompo, he is today an elderly man who lives in one of the remotest corners of Kenya, far from towns, villages, and surfaced roads. Although very few Maasai in Kenya and Tanzania have ever met him, he continues to command huge respect. In this programme journalist Stuart Butler travels to Kenya to meet Mokompo and find out the spiritual secrets of one the country's last laibons.

(Photo: Mokompo. Credit: Stuart Butler)

**SUN 11:00 BBC News (w172ykq1b05pjfv)**  
The latest five minute news bulletin from BBC World Service.

**SUN 11:06 The Newsroom (w172yl7nqdjnw27)**  
The world's Newsroom brings you global events as they happen

**SUN 11:30 BBC News Summary (w172ykqvrqscwq7)**  
The latest two minute news summary from BBC World Service.

**SUN 11:32 The Compass (w3ct42d7)**  
Money, Money, Money

Money, money, money: Value

In the second episode Rachel explores the subject of value. Beginning with the volatility of Bitcoin, she goes on to find out about growing up in Brazil's years of hyperinflation, living in the gift economy of an Indonesian island and whether money is the root of happiness.

Producers: Frank Stirling and Leo Schick

(Photo: A representation of the virtual cryptocurrency Bitcoin. Credit: Edgar Su/Reuters)

A Storyglass production for the BBC World Service

**SUN 12:00 BBC News (w172ykq1b05pn5z)**  
The latest five minute news bulletin from BBC World Service.

**SUN 12:06 World Questions (w3ct3hnp)**  
[Repeat of broadcast at 14:06 on Saturday]

**SUN 13:00 BBC News (w172ykq1b05pry3)**  
The latest five minute news bulletin from BBC World Service.

**SUN 13:06 Newshour (w172yfbf5ys9wd)**  
Elections in Lebanon: Will things change?

This is Lebanon's first set of elections since a massive currency crisis in 2019 and a devastating fertiliser warehouse explosion at the Port of Beirut that killed at least 215 people in August 2020.

Also on the programme: Yet another targeted mass shooting of black people in the United States, we hear from Buffalo in New York; and winning the Eurovision song contest - what does it mean for Ukraine?

(Photo: A Lebanese voter casts her ballot paper during parliamentary elections at a polling station in Beirut, Lebanon. Credit: EPA/WAEL HAMZEH)

**SUN 14:00 BBC News (w172ykq1b05pwp7)**  
The latest five minute news bulletin from BBC World Service.

**SUN 14:06 Sportsworld (w172ygpjpcqkq0)**  
Live Sporting Action

In an extended Sportsworld, Max Farookhi presents coverage and full commentary of the Women's FA Cup Final from Wembley between Chelsea and Manchester City. Following the conclusion of that match, attention will switch to the Premier League with Delyth Lloyd. Our commentary match will be Everton against Brentford. We'll also keep up to date with the other Premier League matches of the day, with title-chasing Manchester City among those in action.

Image: Lauren Hemp of Manchester City battles for possession with Jess Carter of Chelsea during the FA Women's Continental Tyres League Cup Final match between Chelsea Women and Manchester City Women at The Cherry Red Records Stadium on March 05, 2022 in Wimbledon, England. (Photo by Emma Simpson - The FA/The FA via Getty Images)

**SUN 19:00 BBC News (w172ykq1b05qhdw)**  
The latest five minute news bulletin from BBC World Service.

**SUN 19:06 The Newsroom (w172yl7nqdjpv18)**  
The world's Newsroom brings you global events as they happen

**SUN 19:30 BBC News Summary (w172ykqvrqsdvp8)**  
The latest two minute news summary from BBC World Service.

**SUN 19:32 Unspun World with John Simpson (w3ct42bz)**  
[Repeat of broadcast at 11:32 on Saturday]

**SUN 20:00 BBC News (w172ykq1b05qm50)**  
The latest five minute news bulletin from BBC World Service.

**SUN 20:06 The History Hour (w3ct3914)**  
The war in Transnistria

With speculation mounting that President Putin might mount an attack on Moldova, Max Pearson hears a first-hand account of the war in the 1990s between the Moldovans and Russian-backed separatists in the disputed region of Transnistria. There's also a chilling story from the Cold War about how a Soviet air defence official prevented a potential catastrophe by realising that a computer warning about a US nuclear attack was a false alarm.

In the second-half of the History Hour, an Egyptian poet remembers how 48 hours of unrest in 1977 forced the government to scrap a huge increase in the cost of bread, and an Icelandic geophysicist recalls how the 2010 eruption of the Eyjafjallajökull volcano caused disruption all over Europe.

PHOTO: Russian-speaking Transnistrian fighters during the war (Getty Images)

**SUN 21:00 BBC News (w172ykq1b05qxx4)**  
The latest five minute news bulletin from BBC World Service.

**SUN 21:06 Newshour (w172yfbf5yt8vf)**  
Finland announces NATO membership application

Finland's president and prime minister have announced that the country will apply for NATO membership. The move has been welcomed broadly by member states, who must agree unanimously in order to allow new members. Sweden is expected to announce their intention to apply in suit.

Also on the programme: Lebanon is holding its first elections since the 2019 economic collapse today and there is little hope among the majority of the population living in poverty that much will change; and the eruption of the Tonga volcano in January has been confirmed as the biggest explosion ever recorded in the atmosphere by modern instrumentation.

(Photo credit: Reuters)

**SUN 22:00 BBC News (w172ykq1b05qvn8)**  
The latest five minute news bulletin from BBC World Service.

**SUN 22:06 Tech Tent (w3ct3751)**  
Learning the lessons of Wannacry, five years on

Tech Tent speaks to Marcus Hutchins, the British cyber security expert who singlehandedly stopped the Wannacry attack. The

BBC's cyber reporter Joe Tidy and the cyber expert Lisa Forte discuss Wannacry's legacy. Also this week why Russians are resorting to medieval memes to express dissent about the war in Ukraine, how Tiktok is transforming Eurovision, and Tony Fadell, inventor of the Ipod reflects on the announcement it's being discontinued.

**SUN 22:30 BBC News Summary (w172ykqvrqsf6xn)**  
The latest two minute news summary from BBC World Service.

**SUN 22:32 Hidden Sport (w3ct41d5)**  
[Repeat of broadcast at 09:32 on Saturday]

**SUN 22:50 Over to You (w3ct35s4)**  
[Repeat of broadcast at 09:50 on Saturday]

**SUN 23:00 BBC News (w172ykq1b05qzdd)**  
The latest five minute news bulletin from BBC World Service.

**SUN 23:06 The Newsroom (w172yrwsvxwzfz)**  
The world's Newsroom brings you global events as they happen

**SUN 23:20 Sports News (w172ygh1n85d2fp)**  
BBC Sport brings you all the latest stories and results from around the world.

**SUN 23:30 BBC News Summary (w172ykqvrqsfbns)**  
The latest two minute news summary from BBC World Service.

**SUN 23:32 Outlook (w3ct41dd)**  
[Repeat of broadcast at 09:32 today]

## MONDAY 16 MAY 2022

**MON 00:00 BBC News (w172ykq1b05r34j)**  
The latest five minute news bulletin from BBC World Service.

**MON 00:06 From Our Own Correspondent (w3ct327b)**  
[Repeat of broadcast at 04:06 on Sunday]

**MON 00:30 BBC News Summary (w172ykqvrqsfqdx)**  
The latest two minute news summary from BBC World Service.

**MON 00:32 Comedians vs. the News (w3ct3jtb)**  
Fabrizio Copano and Evelyn Mok

Jess Salomon and Eman El-Husseini investigate funny and curious headlines from around the world.

They're joined by Chilean comedian Fabrizio Copano and Swedish actor and stand-up Evelyn Mok to see the funny side of the news.

This week we find out why a very public shower is threatening the Chilean constitution and why a Swedish supreme court judge got caught on the wrong side of the law.

Join #Comediansvsthenews for the funniest take on the headlines you've heard this week.

**MON 01:00 BBC News (w172ykq1p8gw24t)**  
The latest five minute news bulletin from BBC World Service.

**MON 01:06 The Newsroom (w172yl7p2ntvds6)**  
The world's Newsroom brings you global events as they happen

**MON 01:30 BBC News Summary (w172yqkw402kff6)**  
The latest two minute news summary from BBC World Service.

**MON 01:32 Discovery (w3ct42d3)**  
The Curious Cases of Rutherford and Fry

The weird waves of wi-fi

We use wi-fi every day, but do you know how it works? "Is it waves and science or just some mystical magical force?" wonders listener Abby.

Well, our science sleuths are on the case. To help them navigate the strange realm of electromagnetic waves they are joined by Andrew Nix, Professor of Wireless Communication Systems from the University of Bristol. He explains why your wi-fi

router won't heat up your baked beans, but your microwave will.

Andrea Goldsmith, Professor of Electrical and Computer Engineering at Princeton University, also joins to reveal how these waves are crammed full of 0s and 1s- whether that's a pic of your pets or a video chat with pals.

And finally, how do you get the best wi-fi at home? Dr Rutherford, it turns out, has made some rookie errors. Listen out for our top tips so you don't make them too!

**MON 02:00 BBC News (w172ykq1p8gw5wy)**

The latest five minute news bulletin from BBC World Service.

**MON 02:06 The Newsroom (w172y17p2ntvjbb)**

The world's Newsroom brings you global events as they happen

**MON 02:30 BBC News Summary (w172ykqw402kk5b)**

The latest two minute news summary from BBC World Service.

**MON 02:32 The Climate Question (w3ct3khw)**

Why is Asia embracing nuclear power?

China currently has 53 nuclear power plants with plans to scale up significantly in the next decade, while India is planning to build 10 new power plants over the next three years. South Korea's new government has committed to restarting its civil nuclear programme and even Japan's prime minister has pledged to resume nuclear power in a country that has long been resistant.

Following Russia's invasion of Ukraine, energy security has now become more of a priority with countries looking for alternatives to Russian gas. And as countries transition to renewable power in an effort to reach net zero by 2050, governments are looking for a stable, green power supply which is lower cost. In the latest IPCC report, all pathways recommended nuclear in some form to mitigate against climate change.

After nuclear disasters such as Fukushima in Japan, safety has become an even more pressing issue, both in the region and globally, in the face of a resistant public and to safeguard communities around any power plants. We gained access to the Hinkley Point power plant in the UK which has adapted the design of the reactors to make them safer after what happened in Japan; but the pace of building has been slow and costs have been high. In China, a commitment to build more has led to a coordinated approach in terms of training, the supply chain and funding. But there are challenges ahead.

Presenters Kate Lamb and Jordan Dunbar are joined by Changhua Wu, a policy analyst specialising in China's environment, energy, climate change and sustainable development; Diane Cameron, head of the Nuclear Technology Development and Economics Division at the OECD Nuclear Energy Agency; Edwin Lyman, expert on nuclear safety and proliferation; and Director of Nuclear Power Safety at the Union of Concerned scientists in Washington.

Producers: Serena Tarling and Alex Murray  
 Researcher: Immy Rhodes  
 Series Producer: Alex Lewis  
 Sound engineer: Tom Brignell  
 Editor: Richard Fenton-Smith

**MON 03:00 BBC News (w172ykq1p8gw9n2)**

The latest five minute news bulletin from BBC World Service.

**MON 03:06 Tech Tent (w3ct3751)**

[Repeat of broadcast at 22:06 on Sunday]

**MON 03:30 BBC News Summary (w172ykqw402kxng)**

The latest two minute news summary from BBC World Service.

**MON 03:32 Hidden Sport (w3ct41d5)**

[Repeat of broadcast at 09:32 on Saturday]

**MON 03:50 Over to You (w3ct35s4)**

[Repeat of broadcast at 09:50 on Saturday]

**MON 04:00 BBC News (w172ykq1p8gwf6)**

The latest five minute news bulletin from BBC World Service.

**MON 04:06 The Newsroom (w172y17p2ntvs0l)**

The world's Newsroom brings you global events as they happen

**MON 04:30 BBC News Summary (w172ykqw402ksnl)**

The latest two minute news summary from BBC World Service.

**MON 04:32 The Conversation (w3ct37ll)**

Tracing forgotten female ancestors

Kim Chakanetsa meets two genealogists passionate about uncovering the forgotten stories of their clients' female ancestors.

Kenyatta D Berry is a lawyer and genealogist from the USA. She is the author of *The Family Tree Toolkit* and the co-host of *The Genealogy Roadshow* on PBS. She caught the genealogy bug by chance, when she started looking into her ex-boyfriend's family history. She is an expert on African American ancestry and on the specific challenges people who descend from enslaved individuals face when looking into their families' past.

At the age of 15, Belgian Marie Cappart started looking into her country's national archives to find out more about her great-aunt, Maggie Nicholls. During WWII, Maggie helped three Canadian pilots survive in Nazi-occupied Belgium. She was later arrested and killed because of that. Marie went on to graduate in history and wrote several books, including *Guide to Genealogy in Belgium*. She is also the country manager for the online genealogy platform *MyHeritage* and she helps other people track down their ancestors.

Produced by Alice Gioia

(Image: (L), Marie Cappart, courtesy Marie Cappart. (R), Kenyatta D Berry, courtesy Kenyatta D Berry.)

**MON 05:00 BBC News (w172ykq1p8gwk4b)**

The latest five minute news bulletin from BBC World Service.

**MON 05:06 Newsday (w172yf8hg8fx5sr)**

Rising cost of living affecting economies around the world

The cost of living crisis is having an impact around the world - we explore the impact it is having in India where many children are not getting enough to eat.

The killing of 10 black people in the city of Buffalo has America once again raising hard questions about gun violence and racism.

And the BBC has seen more evidence of apparent war crimes committed against Ukrainian civilians by Russian forces.

**MON 06:00 BBC News (w172ykq1p8gwnwg)**

The latest five minute news bulletin from BBC World Service.

**MON 06:06 Newsday (w172yf8hg8fx9jw)**

British prime minister to visit Northern Ireland amid escalating tensions

The British prime minister is to visit Northern Ireland today amid escalating tensions over trading arrangements in the province. Boris Johnson has warned the EU that he's preparing legislation to override the Northern Ireland protocol.

Also, a special report from Ukraine where more than 600 civilians were shot dead during the Russian occupation of the town of Bucha, a senior police officer there describes their deaths as executions.

And new data from China has highlighted the damage inflicted on the world's second largest economy by lockdowns introduced to fight coronavirus.

**MON 07:00 BBC News (w172ykq1p8gwsml)**

The latest five minute news bulletin from BBC World Service.

**MON 07:06 Newsday (w172yf8hg8fx90)**

The British prime minister visits Northern Ireland

The British prime minister is to visit Northern Ireland today amid escalating tensions over trading arrangements in the province. Boris Johnson has warned the EU that he is preparing legislation to override the Northern Ireland Protocol.

Also, the cost of living crisis is hitting hard around the world - we look at the impact in India where many children are not getting enough to eat.

We have an update on elections in Lebanon, the country's first since a huge explosion occurred in Beirut, in which several people highlighted the rotten state of governance there.

**MON 08:00 BBC News (w172ykq1p8gwxcq)**

The latest five minute news bulletin from BBC World Service.

**MON 08:06 HARDtalk (w3ct32lb)**

Inger Ashing: Is the war in Ukraine overshadowing other crises?

Zeinab Badawi speaks to Inger Ashing, CEO of the charity Save the Children International. What is her organisation doing in Ukraine, and is the war with Russia taking the focus off other global hotspots, leaving millions of children in peril?

**MON 08:30 BBC News Summary (w172ykqw402l8n3)**

The latest two minute news summary from BBC World Service.

**MON 08:32 Business Daily (w3ct30x4)**

Business Daily Meets: Estonia's first billionaire

In the first episode of our new strand - Business Daily Meets - we hear from Estonia's first billionaire, Kristo Käärmann.

In this in-depth interview the TransferWise (now Wise) co-founder and CEO explains how a €500 loss led to the creation of a multi-billion dollar business.

He tells us about creating something from nothing, keeping his ego in check, and insists saving customers \$1 billion a year is only the start of the journey.

Presenter: Rahul Tandon  
 Producer: Sam Clack

Image: Kristo Käärmann; Credit: Jake Farra/Wise

**MON 08:50 Witness History (w3ct3byp)**

People Power in the Philippines

In 1986, four days of huge public protests brought down President Ferdinand Marcos of the Philippines. Kate McGowan, in Manila, talks to the leading Filipino novelist, Jose Dalisay, about the demonstrations. This edition of Witness History was first broadcast in 2011.

PHOTO: Filipino troops celebrating the fall of President Marcos (Getty Images)

**MON 09:00 BBC News (w172ykq1p8gx13v)**

The latest five minute news bulletin from BBC World Service.

**MON 09:06 The Climate Question (w3ct3khw)**

[Repeat of broadcast at 02:32 today]

**MON 09:30 BBC News Summary (w172ykqw402ldd7)**

The latest two minute news summary from BBC World Service.

**MON 09:32 CrowdScience (w3ct3j6l)**

Does photographic memory exist?

Most people are great at remembering key points from important events in their lives, while the finer details - such as the colour of the table cloth in your favourite restaurant or the song playing on the radio while you brushed your teeth - are forgotten. But some people seem to have the power to remember events, documents or landscapes with almost perfect recall, which is widely referred to as having a photographic memory.

Crowdsience listeners Tracy and Michael want to know if photographic memory actually exists and if not, what are the memory processes that allow people to remember certain details so much better than others?

Putting her own memory skills to the test along the way, presenter Marnie Chesterton sets out to investigate just what's happening inside our brains when we use our memories, the importance of being able to forget and why some people have better memories than others.

Produced by Hannah Fisher and presented by Marnie Chesterton for the BBC World Service.

Contributors:  
 Stephen Wiltshire  
 Annette Wiltshire  
 Dr Farahnaz Wick  
 Professor Craig Stark

[Image credit: Getty Images]

**MON 10:00 BBC News (w172ykq1p8gx4vz)**

The latest five minute news bulletin from BBC World Service.

**MON 10:06 The Cultural Frontline (w3ct37rc)**  
[Repeat of broadcast at 23:32 on Saturday]

**MON 10:30 BBC News Summary (w172ykqw402lj4c)**  
The latest two minute news summary from BBC World Service.

**MON 10:32 Trending (w3ct3bqs)**  
[Repeat of broadcast at 05:32 on Saturday]

**MON 10:50 More or Less (w3ct3k4l)**  
[Repeat of broadcast at 05:50 on Saturday]

**MON 11:00 BBC News (w172ykq1p8gx8m3)**  
The latest five minute news bulletin from BBC World Service.

**MON 11:06 The Newsroom (w172yl7p2ntwm7h)**  
The world's Newsroom brings you global events as they happen

**MON 11:30 BBC News Summary (w172ykqw402lmwh)**  
The latest two minute news summary from BBC World Service.

**MON 11:32 The Conversation (w3ct37lt)**  
[Repeat of broadcast at 04:32 today]

**MON 12:00 BBC News (w172ykq1p8gxdc7)**  
The latest five minute news bulletin from BBC World Service.

**MON 12:06 Outlook (w3ct34n6)**  
Bike-riding bank robber, part 1

Olympic hopeful to audacious thief – the cyclist who turned to crime.

Movies influenced Tom's biggest life decisions. Slacker film Reality Bites made him give up becoming an Olympic cyclist, and heist film Heat 'inspired' him to make the bizarre leap from fiction to the reality of committing a crime. But there are only so many banks you can rob before your ego, and the FBI, start catching up with you.

Film clips: Reality Bites/Ben Stiller/Jersey Films  
Heat/Michael Mann/Regency Enterprises and Forward Pass

Get in touch: outlook@bbc.com

Presenter: Mobeen Azhar  
Producer: Louise Morris

(Photo: Tom Justice. Credit: Courtesy of Tom Justice)

**MON 12:50 Witness History (w3ct3byp)**  
[Repeat of broadcast at 08:50 today]

**MON 13:00 BBC News (w172ykq1p8gxj3c)**  
The latest five minute news bulletin from BBC World Service.

**MON 13:06 The Newsroom (w172yl7p2ntwvqr)**  
The world's Newsroom brings you global events as they happen

**MON 13:30 BBC News Summary (w172ykqw402lwcr)**  
The latest two minute news summary from BBC World Service.

**MON 13:32 CrowdScience (w3ct3j6t)**  
[Repeat of broadcast at 09:32 today]

**MON 14:00 BBC News (w172ykq1p8gxmvh)**  
The latest five minute news bulletin from BBC World Service.

**MON 14:06 Newshour (w172yfbysg805ss)**  
Hundreds of Ukrainians reportedly executed in Bucha

The BBC has learned that around 650 people were shot in what a senior police official has described as executions in the Bucha region outside Ukraine's capital Kyiv. The BBC's Sarah Rainsford has been investigating what happened.

Also in the programme, the UK government is poised to introduce legislation that would allow ministers in London to override parts of the Brexit deal on Northern Ireland; and North Korea's leader Kim Jong-un has lambasted health officials and ordered the army to help distribute medicine, as a wave of Covid cases sweeps through the country.

(Picture: Flowers on the ground at the site of a mass grave on May 15, 2022 in Bucha, Ukraine. Picture credit: Getty Images)

**MON 15:00 BBC News (w172ykq1p8gxrlm)**  
The latest five minute news bulletin from BBC World Service.

**MON 15:06 HARDtalk (w3ct32lb)**  
[Repeat of broadcast at 08:06 today]

**MON 15:30 BBC News Summary (w172ykqw402m3w0)**  
The latest two minute news summary from BBC World Service.

**MON 15:32 World Business Report (w172yk4krbmwn13)**  
China's economy slows sharply

Amid a wave of Covid lockdowns, there has been a sharp slowdown in the Chinese economy. We hear from one Shanghai resident about the ongoing impact of lockdowns in the city. And we explore the potential impact on the global economy with the independent economist George Magnus. Also in the programme, McDonald's is selling its business in Russia, in response to the country's invasion of Ukraine. Anne McElvoy, executive editor of The Economist talks us through the fast food giant's history in Russia. International wheat prices have reached fresh record highs as an export ban by India threatens to squeeze the world's wheat supply even further. We get a sense of how it could affect the world's largest wheat importer, Egypt, from Angy Ghannam, deputy editor of BBC Monitoring in Cairo. Plus, our regular workplace commentator, Pilita Clark, makes the case for staying quiet in work meetings.

Today's edition is presented by Ed Butler, and produced by Faarea Masud, Sara Parry, and Gabriele Shaw.

(Picture: A medic takes a Covid test sample in Shanghai. Picture credit: Getty Images.)

**MON 16:00 BBC News (w172ykq1p8gxwbr)**  
The latest five minute news bulletin from BBC World Service.

**MON 16:06 BBC OS (w172yg1jkrct8pt)**  
Buffalo shooting: Victims' names released

The names of the 10 people killed in a racially-motivated attack in the US city of Buffalo, in New York state, have been released by officials. We hear from a local reporter and from members of the community where the attack took place.

We hear about an investigation by our correspondent in Ukraine into the killings of civilians with further evidence of apparent war crimes committed by Russian forces.

We get reaction from Sweden after the country confirmed it's going to apply to join the military alliance Nato.

This week we'll be talking about the cost of living crisis around the world. We go to Sri Lanka where people have been protesting against a massive spike in the cost of food, medicine and fuel.

(Photo: A person lights candles at a memorial for victims near the scene of yesterday's shooting at a Tops Friendly Market grocery store in Buffalo, New York, USA, 15 May 2022. Credit: BRANDON WATSON/EPA)

**MON 17:00 BBC News (w172ykq1p8gy02w)**  
The latest five minute news bulletin from BBC World Service.

**MON 17:06 BBC OS (w172yg1jkrctdfy)**  
Cost of living crisis: Sri Lanka

We explain factors behind the global cost of living crisis, and hear from two people in conversation from Sri Lanka where a massive spike in the cost of food, medicine and fuel has sparked protests.

We have a report by our correspondent in Ukraine who has spent some time with men protecting the critical frontline against Russian forces in the eastern city of Iyzum, known as a gateway to Donbas region.

We hear about the killings in the US city of Buffalo over the weekend and explain how racially-motivated assailants, radicalised online, take their ideology to deadly extremes

We also go to Nigeria to talk about the reaction to the killing of a student accused of blasphemy.

(Photo: Vehicles queue to fetch fuel from a gas station amid a fuel shortage in Colombo, Sri Lanka, 16 May 2022. Credit CHAMILA KARUNARATHNE/EPA)

**MON 18:00 BBC News (w172ykq1p8gy3v0)**  
The latest five minute news bulletin from BBC World Service.

**MON 18:06 Outlook (w3ct34n6)**  
[Repeat of broadcast at 12:06 today]

**MON 18:50 Witness History (w3ct3byp)**  
[Repeat of broadcast at 08:50 today]

**MON 19:00 BBC News (w172ykq1p8gy714)**  
The latest five minute news bulletin from BBC World Service.

**MON 19:06 The Newsroom (w172yl7p2ntxl6j)**  
The world's Newsroom brings you global events as they happen

**MON 19:30 BBC News Summary (w172ykqw402mlvj)**  
The latest two minute news summary from BBC World Service.

**MON 19:32 Sport Today (w172ygf4286rk1)**  
2022/05/16 GMT

BBC sports correspondents tell the story behind today's top sporting news, with interviews and reports from across the world.

**MON 20:00 BBC News (w172ykq1p8gycb8)**  
The latest five minute news bulletin from BBC World Service.

**MON 20:06 The Climate Question (w3ct3khw)**  
[Repeat of broadcast at 02:32 today]

**MON 20:30 BBC News Summary (w172ykqw402mqln)**  
The latest two minute news summary from BBC World Service.

**MON 20:32 Discovery (w3ct42d4)**  
The Curious Cases of Rutherford and Fry

Surprising symmetries

Two eyes, two arms, two legs - we are roughly symmetrical on the outside, but inside we are all over the place! We just have one heart, which is usually on the left, one liver on the right, one spleen and one appendix. "Why is that?" wonders listener Joanne.

Our science sleuths discover that being symmetrical down the middle - at least on the outside - is by far the most common body plan across the animal kingdom. Professor Sebastian Shimeld from the University of Oxford takes us on a journey into the deep evolutionary past, to uncover how two-sided body structures first emerged in ancient worm-like creatures, and why this layout eventually proved so useful for swimming, walking and flying.

Garden snails turn out to be a surprising exception - their shells coil in one direction and on just one side of their body. Professor Angus Davison from the University of Nottingham tells the tale of his international quest to find a romantic partner for Jeremy - a rare left-coiling snail who could only mate with another left-coiling snail!

Dr Daniel Grimes from the University of Oregon unfolds the delicate mechanisms by which an initially symmetrical embryo starts to develop differently down one side, and everyone puzzles over the mystery of the left-handed 'mirror molecules' - so called L-amino acids - which turn out to be the building blocks of every living organism. A curious case indeed!

**MON 21:00 BBC News (w172ykq1p8gyh2d)**  
The latest five minute news bulletin from BBC World Service.

**MON 21:06 Newshour (w172yfbysg8110p)**  
Intense fighting in eastern Ukraine

As Ukrainian forces hold out against Russia's offensive in the east, even, in some cases, pushing Russian forces back, a Ukrainian member of parliament tells us where he sees the war going. We also hear from our reporters, gathering evidence of war crimes, and on the front line with Ukraine's volunteer fighters.

Also in the programme: how sandstorms are ripping through Iraq and beyond; and a breath of optimism from one of Lebanon's new independent MPs..

(Image: A man walks past a residential building damaged by Russian shelling in Severodonetsk, north-west of Luhansk in the

Donbas region of Ukraine, 16 April 2022; Credit: EPA / STR)

**MON 22:00 BBC News (w172ykq1p8gytj)**

The latest five minute news bulletin from BBC World Service.

**MON 22:06 HARDtalk (w3ct32lb)**

[Repeat of broadcast at 08:06 today]

**MON 22:30 BBC News Summary (w172ykw402mz2x)**

The latest two minute news summary from BBC World Service.

**MON 22:32 The Conversation (w3ct37lt)**

[Repeat of broadcast at 04:32 today]

**MON 23:00 BBC News (w172ykq1p8gyqkn)**

The latest five minute news bulletin from BBC World Service.

**MON 23:06 The Newsroom (w172yrwt765nqm7)**

The world's Newsroom brings you global events as they happen

**MON 23:20 Sports News (w172ygh20jgltly)**

BBC Sport brings you all the latest stories and results from around the world.

**MON 23:30 BBC News Summary (w172ykw402n2v1)**

The latest two minute news summary from BBC World Service.

**MON 23:32 World Business Report (w172yk5d627kxf)**

Sri Lanka fuel shortages

Sri Lanka's new Prime Minister, Ranil Wickremesinghe, issues an urgent warning over the country's fuel crisis, saying \$75 million is needed to pay for essential imports. Supplies of food and medicine are affected. We hear about the impact of the crisis on ordinary Sri Lankans and ask what next for the country.

(Picture: fuel pump; Credit: Getty Images)

**TUESDAY 17 MAY 2022**

**TUE 00:00 BBC News (w172ykq1p8gyv9s)**

The latest five minute news bulletin from BBC World Service.

**TUE 00:06 The History Hour (w3ct3914)**

[Repeat of broadcast at 20:06 on Sunday]

**TUE 01:00 BBC News (w172ykq1p8gyz1x)**

The latest five minute news bulletin from BBC World Service.

**TUE 01:06 Business Matters (w172ydp5c3zzft)**

McDonald's pulls out of Russia

The fast food giant McDonald's has ceased its operations in Russia, two months after temporarily closing 850 branches across the country. The company said Russia's 'humanitarian crisis' in Ukraine, as well as unstable market conditions triggered by the conflict, are behind its decision to stop selling hamburgers there. The first McDonald's in Russia was opened in Moscow in 1990, and was widely seen as a symbol of western democracy.

**TUE 02:00 BBC News (w172ykq1p8gz2t1)**

The latest five minute news bulletin from BBC World Service.

**TUE 02:06 The Newsroom (w172yl7p2ntyfff)**

The world's Newsroom brings you global events as they happen

**TUE 02:30 BBC News Summary (w172ykw402ng2f)**

The latest two minute news summary from BBC World Service.

**TUE 02:32 The Documentary (w3ct41vv)**

Escape from the Taliban

Sana Safi follows the stories of two Afghan women judges who have had to go into hiding after the Taliban takeover. Through encrypted networks and messages, Sana gets unprecedented access to the secretive operatives trying to get the women and their families out of the country. It is a race against time as the Taliban go door to door looking for the women.

Producer: Paul Connolly

(Photo: Afghanistan women buy burqa at a market. Credit: EPA)

**TUE 03:00 BBC News (w172ykq1p8gz6k5)**

The latest five minute news bulletin from BBC World Service.

**TUE 03:06 Outlook (w3ct34n6)**

[Repeat of broadcast at 12:06 on Monday]

**TUE 03:50 Witness History (w3ct3byp)**

[Repeat of broadcast at 08:50 on Monday]

**TUE 04:00 BBC News (w172ykq1p8gz6k5)**

The latest five minute news bulletin from BBC World Service.

**TUE 04:06 The Newsroom (w172yl7p2ntyfxp)**

The world's Newsroom brings you global events as they happen

**TUE 04:30 BBC News Summary (w172ykw402npxp)**

The latest two minute news summary from BBC World Service.

**TUE 04:32 In the Studio (w3ct3jhw)**

N K Jemisin: Writing new worlds

New York-based writer N. K. Jemisin is one of the biggest names in modern science-fiction. She's the first in the genre's history to win three consecutive Hugo Awards, for each book in her Broken Earth trilogy.

In conversation with presenter Dr Vic James, Jemisin talks in-depth about world-building. She reveals how the initial idea for Broken Earth came to her in a dream. This then led her to a NASA writing residency and a trip to Hawaii, flying over its volcanoes in order to accurately visualise the trilogy's setting: a super-continent called The Stillness that is ravaged by earthquakes and volcanic eruptions.

Jemisin reflects on how it all came together, how she gives voice to the oppressed, and why she thinks these books have resonated with so many people around the world.

Presenter: Vic James

Producer: Eliza Lomas

Executive produced by Rebecca Armstrong for the BBC World Service

**TUE 05:00 BBC News (w172ykq1p8gzg1f)**

The latest five minute news bulletin from BBC World Service.

**TUE 05:06 Newsday (w172yf8hg802pv)**

Besieged Mariupol soldiers evacuated

President Zelensky and the Ukrainian military have hailed as heroes more than two-hundred soldiers now evacuated from the long-besieged steelworks in Mariupol. We'll go live to Ukraine.

We hear a warning from the UN children's agency about a rise in severely malnourished children around the world

And focus for a second day on the global cost of living crisis, this time in Italy where workers in the industrial centres are under financial pressure.

**TUE 06:00 BBC News (w172ykq1p8gzk5k)**

The latest five minute news bulletin from BBC World Service.

**TUE 06:06 Newsday (w172yf8hg806fz)**

Ukrainian soldiers evacuated from Azovstal steelworks in Mariupol

More than 260 Ukrainian soldiers have been evacuated from the steelworks in Mariupol, their final holdout. We'll explain the deal to get them out and what it means for the war in Ukraine.

We'll also talk about why Turkey's against two new members joining them in the Nato military alliance - Sweden and Finland want in after Russia's war in Ukraine, but President Erdogan says "no".

The UN children's agency UNICEF is warning that numbers of severely malnourished children are rising around the world - they're blaming a combination of the pandemic, climate change and conflict.

**TUE 07:00 BBC News (w172ykq1p8gzpjp)**

The latest five minute news bulletin from BBC World Service.

**TUE 07:06 Newsday (w172yf8hg80b63)**

Ukrainian Azovstal defenders hailed as heroes

President Zelensky and the Ukrainian military have hailed as heroes more than two-hundred soldiers now evacuated from the long-besieged steelworks in Mariupol. Others remain inside but the army says their mission is complete.

Sri Lanka's new prime minister says the country is down to its last day of petrol as it faces its worst economic crisis in more than 70 years.

And we continue our focus on the global cost of living crisis, this time in Italy where workers in the industrial centres are under financial pressure.

**TUE 08:00 BBC News (w172ykq1p8gz8t8)**

The latest five minute news bulletin from BBC World Service.

**TUE 08:06 People Fixing The World (w3ct3j2b)**

Turning mud into 'clean' concrete

A young scientist has developed a white powder which gives waste soil concrete-like properties.

Gnanli Landrou grew up in Togo, helping his neighbours dry out soil to make bricks, and his big dream is to help people like them build stronger, cheaper, houses.

But the European building industry is also excited about his new, low carbon building material.

We talk to Gnanli about his ambitions for this extraordinary powder, and meet the Swiss architect who is about to build a luxury apartment block with it.

Presenter: Myra Anubi

Reporter: Jo Mathys

Executive producer: Tom Colls

Editor: Penny Murphy

Image: Gnanli Landrou

**TUE 08:30 BBC News Summary (w172ykw402p5k6)**

The latest two minute news summary from BBC World Service.

**TUE 08:32 Business Daily (w3ct3165)**

Rebuilding Puerto Rico's electricity supply

Samira Hussain takes you to Puerto Rico. Back to back hurricanes 5 years ago shattered the island's electricity grid, leading to the longest blackout in American history. Residents are still trying to claw their way out of the darkness.

But one Puerto Rican town, in the island's mountainous region, may have found a solution. Arturo Massol Deya is the associate director of Casa Pueblo, he tells us how he's using solar panels to ensure a reliable supply of electricity to his local community.

We also hear from Wayne Stensby, CEO of Luma Energy. Last year, the transmission and distribution of electricity in Puerto Rico was privatised and handed to Wayne and his team. He tells us the whole system needs a lot of regeneration and investment.

Presenter / Producer: Samira Hussain

Image: Arturo Massol Deya; Credit: Andrew Herbert BBC

**TUE 08:50 Witness History (w3ct3c36)**

The murder of Kelso Cochrane

In May 1959, Kelso Cochrane, a carpenter who'd emigrated to Britain from Antigua, was knifed to death by a gang of white youths in West London. The unsolved murder came at a time of racial tension in the area and led to the first official inquiry into race relations in British history. For its part, the large Caribbean community in West London responded by creating the cultural festival that became the Notting Hill Carnival. Claire Bowes talks to Victoria Christian, a friend of Kelso Cochrane.

PHOTO: The funeral of Kelso Cochrane in 1959 (Hulton-Deutsch Collection/CORBIS/Corbis via Getty Images)

**TUE 09:00 BBC News (w172ykq1p8gz8y0y)**

The latest five minute news bulletin from BBC World Service.

**TUE 09:06 The Documentary (w3ct41vv)**

[Repeat of broadcast at 02:32 today]

**TUE 09:30 BBC News Summary (w172ykqw402p99b)**  
The latest two minute news summary from BBC World Service.

**TUE 09:32 Discovery (w3ct42d4)**  
[Repeat of broadcast at 20:32 on Monday]

**TUE 10:00 BBC News (w172ykq1p8h01s2)**  
The latest five minute news bulletin from BBC World Service.

**TUE 10:06 The Arts Hour (w3ct3902)**  
[Repeat of broadcast at 20:06 on Saturday]

**TUE 11:00 BBC News (w172ykq1p8h05j6)**  
The latest five minute news bulletin from BBC World Service.

**TUE 11:06 The Newsroom (w172y17p2ntzj4l)**  
The world's Newsroom brings you global events as they happen

**TUE 11:30 BBC News Summary (w172ykqw402pjsl)**  
The latest two minute news summary from BBC World Service.

**TUE 11:32 In the Studio (w3ct3jhw)**  
[Repeat of broadcast at 04:32 today]

**TUE 12:00 BBC News (w172ykq1p8h098b)**  
The latest five minute news bulletin from BBC World Service.

**TUE 12:06 Outlook (w3ct352r)**  
Bike-riding bank robber, part 2

The FBI close in. "It's a wake-up call when police are trying to shoot you." Tom Justice's fantasy is fading and things are about to get a lot worse.

Film clips: Heat/Michael Mann/Regency Enterprises and Forward Pass

Get in touch: outlook@bbc.com

Presenter: Mobeen Azhar  
Producer: Louise Morris

(Photo: Tom Justice. Credit: Courtesy of Tom Justice)

**TUE 12:50 Witness History (w3ct3c36)**  
[Repeat of broadcast at 08:50 today]

**TUE 13:00 BBC News (w172ykq1p8h0f0g)**  
The latest five minute news bulletin from BBC World Service.

**TUE 13:06 The Newsroom (w172y17p2ntzrmv)**  
The world's Newsroom brings you global events as they happen

**TUE 13:30 BBC News Summary (w172ykqw402ps8v)**  
The latest two minute news summary from BBC World Service.

**TUE 13:32 Discovery (w3ct42d4)**  
[Repeat of broadcast at 20:32 on Monday]

**TUE 14:00 BBC News (w172ykq1p8h0jrl)**  
The latest five minute news bulletin from BBC World Service.

**TUE 14:06 Newshour (w172yfbysg832pw)**  
Mariupol soldiers evacuated

Ukraine's military says it's working to evacuate all remaining troops from their last stronghold in Mariupol, after two-hundred and sixty-four defenders agreed to leave the Azovstal steel works and were taken to Russian-controlled territory. We hear from an advisor to the Ukrainian defence ministry, and get the latest news on the ground.

Also in the programme: a new exhibition on Feminine Power; and the global cost-of-living challenges.

(Photo: Russian service members stand guard on a road before the evacuation of wounded Ukrainian soldiers from Mariupol. CREDIT: REUTERS/Alexander Ermochenko)

**TUE 15:00 BBC News (w172ykq1p8h0nhq)**  
The latest five minute news bulletin from BBC World Service.

**TUE 15:06 People Fixing The World (w3ct3j2b)**  
[Repeat of broadcast at 08:06 today]

**TUE 15:30 BBC News Summary (w172ykqw402q0s3)**  
The latest two minute news summary from BBC World Service.

**TUE 15:32 World Business Report (w172yk7vj81qrnc)**  
UK government revisits N Ireland trade rules

The UK outlined a plan to change the Brexit deal agreed with the EU on Northern Ireland. Tony Connelly is Brussels correspondent for the Irish TV channel RTE, and explains how the EU is likely to respond to any unilateral measures that might be taken. Also in the programme, amid a worsening economic crisis, Sri Lanka has run out of fuel. We get a sense of what life is like for ordinary Sri Lankans from Saajid Nazmi, who is an e-commerce worker, whose boss has let him work from home because of the rising cost of commuting. Indonesian palm oil farmers have been protesting in Jakarta, after a government ban on the export of palm oil has led to a steep fall in the price of the commodity. We find out more from Djono Albar Burhan of the Indonesian Palm Oil Smallholder Association. Plus, the BBC's Samira Hussain reports on the ongoing power difficulties in Puerto Rico, caused by successive hurricanes five years ago, which heavily damaged the island's electricity grid.

Today's edition is presented by Ed Butler, and produced by Faarea Masud, Sarah Hawkins and Elizabeth Hotson.

(Picture: UK Foreign Secretary Liz Truss. Picture credit: Houses of Parliament.)

**TUE 16:00 BBC News (w172ykq1p8h0s7v)**  
The latest five minute news bulletin from BBC World Service.

**TUE 16:06 BBC OS (w172ygl1jkrqt5lx)**  
Ukraine: Azovstal evacuation

The Ukrainian government says they are working on the next stages of the evacuation of fighters from the Azovstal steelworks in Mariupol. We get details from our colleagues who are monitoring today's developments.

We continue to look at the cost of living crisis around the world and talk to people in the UK affected by rising prices of food, energy and fuel.

President Biden will be visiting the scene of mass shooting in the US city of Buffalo today. We talk to local people there about the life in one of the country's most segregated cities.

Our disinformation reporter tells us about a BBC investigation into misleading adverts on Google that are pushing women towards anti-abortion clinics.

(Photo: A still image taken from a video released by Russian Defence Ministry shows what it claims are service members of Ukrainian forces, who left the besieged Azovstal steel plant, sitting inside a bus in Mariupol, Ukraine. Video released May 17, 2022. Credit: Russian Defence Ministry/Handout via REUTERS)

**TUE 17:00 BBC News (w172ykq1p8h0wzz)**  
The latest five minute news bulletin from BBC World Service.

**TUE 17:06 BBC OS (w172ygl1jkrqt9c1)**  
Cost of living crisis: The UK

We explain factors behind the global cost of living crisis, and hear from two people in the United Kingdom about the impact of rising prices of food, fuel and energy on their lives.

We get details of an explosion in the northern city of Kano in Nigeria.

President Biden will be visiting the scene of mass shooting in the US city of Buffalo today. We talk to local people there about the life in one of the country's most segregated cities.

We speak to our reporter who has been at the mining site in Burkina Faso where eight workers have been trapped underground for a month following a flood.

(Photo: A shopper looking at the salad and vegetables in a branch of Waitrose in south London. Credit: Aaron Chown/PA Wire)

**TUE 18:00 BBC News (w172ykq1p8h10r3)**  
The latest five minute news bulletin from BBC World Service.

**TUE 18:06 Outlook (w3ct352r)**

[Repeat of broadcast at 12:06 today]

**TUE 18:50 Witness History (w3ct3c36)**  
[Repeat of broadcast at 08:50 today]

**TUE 19:00 BBC News (w172ykq1p8h14h7)**  
The latest five minute news bulletin from BBC World Service.

**TUE 19:06 The Newsroom (w172y17p2nv0h3m)**  
The world's Newsroom brings you global events as they happen

**TUE 19:30 BBC News Summary (w172ykqw402qhrm)**  
The latest two minute news summary from BBC World Service.

**TUE 19:32 Sport Today (w172ygf4289ng4)**  
2022/05/17 GMT

BBC sports correspondents tell the story behind today's top sporting news, with interviews and reports from across the world.

**TUE 20:00 BBC News (w172ykq1p8h187c)**  
The latest five minute news bulletin from BBC World Service.

**TUE 20:06 The Documentary (w3ct41vv)**  
[Repeat of broadcast at 02:32 today]

**TUE 20:30 BBC News Summary (w172ykqw402qmrh)**  
The latest two minute news summary from BBC World Service.

**TUE 20:32 Digital Planet (w3ct31yb)**  
Reclaiming African art in digital form

A Nigerian project called Looty is seeking to take back African art in digital form. Members go into museums, take LiDAR scans using their phones, and recreate these African artworks as non-fungible tokens (NFTs). The first piece is one of the Benin Bronzes from the British Museum. Different artistic reimaginings of this ancient artwork are now being sold as NFTs, with parts of the proceeds going to emerging Nigerian artists. Gareth speaks to Looty's founder Chidi about the idea, and blockchain expert Anne Kaluvu comments on the project.

The innovative vision of Amazonia 4.0  
The Amazon rainforest is being destroyed at an alarming rate. Could there be another way? The project Amazonia 4.0 is envisioning harnessing the rainforest's inherent biodiversity through a sustainable bioeconomy. Professor Carlos Nobre explains how, with the help of drones, fibre optic cables and other technologies, this vision may become a reality.

The common fruit fly's digital twin  
One of the most ubiquitously used and best understood organisms in science is the common fruit fly. Many important developments in medicine and biology stem from research on this tiny insect. Now Professor Pavan Ramdya and his team have developed a complete simulated model of the fruit fly, a so-called digital twin. This model can be used by researchers to conduct experiments digitally, which may help speed up research and solve unanswered questions.

The programme is presented by Gareth Mitchell with expert commentary from Angelica Mari.

Studio Manager: Duncan Hannant  
Producers: Hannah Fisher and Florian Bohr

(Photo: A man uses Sony's 3D Creator scanning to create a three-dimensional image  
Credit: PAU BARRENA/AFP via Getty Images)

**TUE 21:00 BBC News (w172ykq1p8h1czh)**  
The latest five minute news bulletin from BBC World Service.

**TUE 21:06 Newshour (w172yfbysg83xxs)**  
Uncertainty over fate of evacuated Azovstal fighters

Ukraine is working on the next stages of the operation to evacuate soldiers from the Azovstal steelworks in Mariupol. We hear from the wife of a man who is still in the Azovstal plant, and from the former head of Ukraine's national security council.

Also on the programme: US President Joe Biden has condemned white supremacy as "a poison running through our body politic" during a visit to Buffalo, New York. Ten black people were killed at a supermarket in the city on Saturday in

what is believed to be a racially motivated hate crime.

And we look at how rising energy prices are hitting businesses in Italy's industrial north.

(Picture: Smoke rises above a plant of Azovstal Iron and Steel Works in Mariupol, 02/05/2022, Reuters/ALEXANDER ERMOCHENKO)

**TUE 22:00 BBC News (w172ykq1p8h1hqm)**

The latest five minute news bulletin from BBC World Service.

**TUE 22:06 People Fixing The World (w3ct3j2b)**

[Repeat of broadcast at 08:06 today]

**TUE 22:30 BBC News Summary (w172ykw402qw00)**

The latest two minute news summary from BBC World Service.

**TUE 22:32 In the Studio (w3ct3jhw)**

[Repeat of broadcast at 04:32 today]

**TUE 23:00 BBC News (w172ykq1p8h1mgr)**

The latest five minute news bulletin from BBC World Service.

**TUE 23:06 The Newsroom (w172yrwt765rmjb)**

The world's Newsroom brings you global events as they happen

**TUE 23:20 Sports News (w172ygh20jgqj1)**

BBC Sport brings you all the latest stories and results from around the world.

**TUE 23:30 BBC News Summary (w172ykw402qzr4)**

The latest two minute news summary from BBC World Service.

**TUE 23:32 World Business Report (w172yk8nyzn11p)**

First broadcast 17/05/2022 22:32 GMT

The latest business and finance news from around the world, on the BBC.

### WEDNESDAY 18 MAY 2022

**WED 00:00 BBC News (w172ykq1p8h1r6w)**

The latest five minute news bulletin from BBC World Service.

**WED 00:06 The Arts Hour (w3ct3902)**

[Repeat of broadcast at 20:06 on Saturday]

**WED 01:00 BBC News (w172ykq1p8h1vz0)**

The latest five minute news bulletin from BBC World Service.

**WED 01:06 Business Matters (w172ydp5c42wbx)**

Elon Musk takes aim at bots

Anonymous, fake accounts online are a nuisance at best, and at worst, a threat to safety and democracy. Elon Musk wants to crack down on them in his planned takeover of Twitter, but says he doesn't trust the platform's own assessment of the problem. We hear from one of his personal friends about what it could mean for the deal.

Mass inflation continues to cause problems across the globe, from shortages in shops to job losses for farmers in Asia and beyond. Ahead of the upcoming G7 summit, experts are wondering if monetary policy can be an effective weapon against price rises. Also, as Japan prepares to welcome tourists, is holidaying on the continent about to make a comeback?

**WED 02:00 BBC News (w172ykq1p8h1zq4)**

The latest five minute news bulletin from BBC World Service.

**WED 02:06 The Newsroom (w172y17p2nv1bbj)**

The world's Newsroom brings you global events as they happen

**WED 02:30 BBC News Summary (w172ykw402qzr4)**

The latest two minute news summary from BBC World Service.

**WED 02:32 The Compass (w3ct42d8)**

Money, Money, Money

Money, money, money: Psychology

Rachel Botsman, a Trust expert and fellow at the Said Business School at Oxford University, looks into the psychology and the morality of money. Among others, she talks to Jain accountant Atul K. Shah, activist and onetime refugee Ghias Aljundi and psychologist and happiness guru Dr. Laurie Santos.

Producer: Frank Stirling and Leo Schick

(Photo: Businessman reaching out for falling bank notes. Credit: Getty Images)

A Storyglass production for BBC World Service

**WED 03:00 BBC News (w172ykq1p8h23g8)**

The latest five minute news bulletin from BBC World Service.

**WED 03:06 Outlook (w3ct352r)**

[Repeat of broadcast at 12:06 on Tuesday]

**WED 03:50 Witness History (w3ct3c36)**

[Repeat of broadcast at 08:50 on Tuesday]

**WED 04:00 BBC News (w172ykq1p8h276d)**

The latest five minute news bulletin from BBC World Service.

**WED 04:06 The Newsroom (w172y17p2nv1kts)**

The world's Newsroom brings you global events as they happen

**WED 04:30 BBC News Summary (w172ykw402qzr4)**

The latest two minute news summary from BBC World Service.

**WED 04:32 The Documentary (w3ct42bq)**

Don't log off: Russia's invasion of Ukraine

Alan Dein connects via social media to absolute strangers and old friends to hear how Russia's invasion of Ukraine has blown away their old lives. Some, like Anna, have fled their home town of Dnipro. Others like Verena, from St Petersburg, have fled the secret police whilst in Odesa Roman awaits the fate of his city.

Producer: Mark Burman

**WED 05:00 BBC News (w172ykq1p8h2byj)**

The latest five minute news bulletin from BBC World Service.

**WED 05:06 Newsday (w172yf8hg8g2zly)**

President Biden visits Buffalo

US President Biden has denounced white supremacy, while visiting the town in which ten mainly black people were killed at the weekend. We'll get a reaction from a Buffalo council member.

We'll bring you the latest on Russia's invasion in Ukraine. Our correspondent has been talking to family members of some of the Ukrainian fighters held up in a massive steel plant in the town of Mariupol.

Also in the programme, there are big demonstrations in Iran, initially over the cost of living, they're increasingly political in nature as we will find out.

**WED 06:00 BBC News (w172ykq1p8h2gpn)**

The latest five minute news bulletin from BBC World Service.

**WED 06:06 Newsday (w172yf8hg8g33c2)**

Russian soldier charged with war crimes

A Russian soldier is charged with war crimes, the first case since the start of the war on Ukraine..

In the United States, Donald Trump's favoured candidates are facing their Republican rivals in two of the five states holding state primaries. The winner will then run in the mid term elections later this year.

Oxfam calls for action on the devastating drought and famine in the Horn of Africa. It says one person may die every 48 seconds if urgent action is not taken.

**WED 07:00 BBC News (w172ykq1p8h2lfs)**

The latest five minute news bulletin from BBC World Service.

**WED 07:06 Newsday (w172yf8hg8g3736)**

Ukraine wants their troops in Mariupol to be exchanged for

captured Russian soldiers

We get more details of what life was like for the soldiers and civilians holding out in the Azov steelworks in Mariupol, we'll hear from a journalist who has just returned from the frontline in the east of Ukraine. Yesterday several other buses were seen leaving the steel plant. Ukraine wants these troops to be exchanged for captured Russian soldiers as part of a deal acknowledged by Moscow.

We go to the American state of Pennsylvania, where a Donald Trump favoured candidate faces his Republican rival in one of five state primaries taking place ahead of mid term elections later this year.

As the Cannes film festival gets underway in the South of France, we'll hear from the director of a short film nominated that looks at the lives of those facing domestic violence.

**WED 08:00 BBC News (w172ykq1p8h2q5x)**

The latest five minute news bulletin from BBC World Service.

**WED 08:06 HARDtalk (w3ct32qv)**

Stella Moris: Will Julian Assange be extradited to the US?

Stephen Sackur speaks to lawyer Stella Moris, wife of Wikileaks founder Julian Assange and mother of two of his children. The British government is about to decide whether to extradite him to the United States to face espionage charges. With his fate on the line, why is Assange such a polarising figure?

**WED 08:30 BBC News Summary (w172ykw402qzr4)**

The latest two minute news summary from BBC World Service.

**WED 08:32 Business Daily (w3ct31bp)**

Generation Z and crypto trading

The lure of making a quick buck means young people have always invested in risky assets. For Generation Z, it is the volatility and the decentralised nature of digital assets such as cryptocurrency and NFTs which is so attractive. They are unregulated, meaning there is no investor protection. Some experts warn that trading them should be categorised as gambling.

Mariko Oi hears from young people who have lost vast sums of money trading in digital assets, Resh Chandran who describes himself as a financial educator offering training in conventional stocks, cryptocurrency and NFT trading in Singapore, and Brian Jung. Brian is an investor, entrepreneur, and influencer. He is best known for his personal finance, credit card, and crypto YouTube channel which boasts one million followers, but compared to other influencers, he is known to talk more cautiously about risks and danger.

Presenter: Mariko Oi

Producer: AnneMarie Parnell

(Photo: Brian Jung. Credit: Brian Jung)

**WED 08:50 Witness History (w3ct3c5g)**

The first McDonald's in Moscow

Following the closure of McDonald's in Russia, we're going back to January 1990 when the global fast food giant opened its first restaurant in Moscow. In 2015, Mike Lanchin spoke to George Cohon, the man who brought the Big Mac to what was then the communist USSR, and to Sveta Polyakova, one of the first locals to work there.

PHOTO: A Soviet police officer outside the first McDonald's (Getty Images)

**WED 09:00 BBC News (w172ykq1p8h2ty1)**

The latest five minute news bulletin from BBC World Service.

**WED 09:06 The Compass (w3ct42d8)**

[Repeat of broadcast at 02:32 today]

**WED 09:30 BBC News Summary (w172ykw402qzr4)**

The latest two minute news summary from BBC World Service.

**WED 09:32 Digital Planet (w3ct31yb)**

[Repeat of broadcast at 20:32 on Tuesday]

**WED 10:00 BBC News (w172ykq1p8h2yp5)**

The latest five minute news bulletin from BBC World Service.

**WED 10:06 The Documentary (w3ct41wd)**  
[Repeat of broadcast at 12:06 on Saturday]

**WED 11:00 BBC News (w172ykq1p8h32f9)**  
The latest five minute news bulletin from BBC World Service.

**WED 11:06 The Newsroom (w172y17p2nv2f1p)**  
The world's Newsroom brings you global events as they happen

**WED 11:30 BBC News Summary (w172ykqwh8cx8yy)**  
The latest two minute news summary from BBC World Service.

**WED 11:32 The Documentary (w3ct42bq)**  
[Repeat of broadcast at 04:32 today]

**WED 12:00 BBC News (w172ykq1p8h365f)**  
The latest five minute news bulletin from BBC World Service.

**WED 12:06 Outlook (w3ct3y8b)**  
Coming out as India's first gay prince

Manvendra Singh Gohil - a real life prince and next in line to a centuries-old royal dynasty in the Indian state of Gujarat - grew up in the 1970s in a 'gilded cage'. His family's desire to keep his blue blood away from 'commoners' meant that, growing up, he missed out on formative experiences like making friends. After a failed marriage to a princess, Manvendra finally shed his royal cocoon and was determined to break out and explore the world, and his sexuality. With the help of his new friend Ashok, a gay rights activist, the prince began a process of self-acceptance that would be put to the ultimate test.

Get in touch: outlook@bbc.com

Presenter: Mobeen Azhar  
Producer: Fiona Woods and Edgar Maddicott

(Photo: Prince Manvendra Singh Gohil in 2010. Credit: Pascal Le Segretain/AIDES & Link/Getty Images)

**WED 12:50 Witness History (w3ct3c5g)**  
[Repeat of broadcast at 08:50 today]

**WED 13:00 BBC News (w172ykq1p8h39xk)**  
The latest five minute news bulletin from BBC World Service.

**WED 13:06 The Newsroom (w172y17p2nv2njy)**  
The world's Newsroom brings you global events as they happen

**WED 13:30 BBC News Summary (w172ykqwh8cxjg3)**  
The latest two minute news summary from BBC World Service.

**WED 13:32 Digital Planet (w3ct31yb)**  
[Repeat of broadcast at 20:32 on Tuesday]

**WED 14:00 BBC News (w172ykq1p8h3fnp)**  
The latest five minute news bulletin from BBC World Service.

**WED 14:06 Newshour (w172yfbysg85ztlz)**  
Ukraine begins first war crimes trial

In the first war crimes trial in Ukraine, a Russian soldier has pleaded guilty to shooting dead a sixty-two year-old Ukrainian in the Sumy region. Sergeant Vadim Shishimarin faces life in prison.

Russia's defence ministry says nearly a-thousand Ukrainian soldiers have surrendered at the Azovstal steel plant in Mariupol.

The BBC has learned that secret schools are operating in Afghanistan to allow girls to continue their studies. The Taliban have refused to allow them to return to classrooms.

The head of the UN has called for a speedy transition to renewable energy after a new report showing the climate crisis accelerated last year – breaking records for sea-levels, ocean heat and greenhouse gas concentrations.

(Photo: Vadim Shishimarin is a 21-year-old tank commander in the Russian armed forces. Credit: Reuters)

**WED 15:00 BBC News (w172ykq1p8h3kdt)**  
The latest five minute news bulletin from BBC World Service.

**WED 15:06 HARDtalk (w3ct32qy)**  
[Repeat of broadcast at 08:06 today]

**WED 15:30 BBC News Summary (w172ykqwh8cxryc)**  
The latest two minute news summary from BBC World Service.

**WED 15:32 World Business Report (w172yk9hdq868f1)**  
EU unveils new energy strategy

The European Commission has revealed a proposal to reduce reliance on Russian energy. There's an increased focus on renewable energy sources such as solar and wind, and we get reaction from Giles Dickson, chief executive of the group Wind Europe. The BBC's Adrienne Murray reports on a scheme to boost North Sea wind energy production. And we hear from Anna Borg, chief executive of Swedish state owned energy company Vattenfall, which is already investing in North Sea wind projects. Also in the programme, a judge in California has thrown out legislation that required publicly listed companies to ensure a certain level of female representation on their boards. We find out more from Laura Whitcombe, global campaign manager of the 30% Club, which campaigns for more gender diversity in companies. Plus, the BBC's Mariko Oi meets some of the young people choosing to engage in high risk cryptocurrency markets.

Today's edition is presented by Sasha Twining, and produced by Faarea Masud, Sarah Hawkins and Elizabeth Hotson.

(Picture: An offshore wind farm. Picture credit: Getty Images.)

**WED 16:00 BBC News (w172ykq1p8h3p4y)**  
The latest five minute news bulletin from BBC World Service.

**WED 16:06 BBC OS (w172yg1jkrkt2j0)**  
Climate indicators breaking records

We get your questions answered on the latest international report on the state of the climate. The global temperature in 2021 didn't break previous records, but other indicators did, like sea level and CO2 concentration in the atmosphere.

We follow the story of the evacuations of Ukrainian troops from the steelworks in Mariupol. It's unclear whether they're going to be freed by Russia in return for Russian prisoners, with lawmakers in Russia discussing a legal ban on exchanging Ukrainian fighters.

Our correspondent in Afghanistan tells us about his visit to underground schools for girls operating after the new Taliban rulers only allowed boys to return to regular classes.

And we hear from people in the United States impacted by the shortage of baby formula.

(Photo: Water recedes near Lone Rock Beach, a popular recreational area that used to be underwater, at Lake Powell, USA. The nation's second largest reservoir has fallen to the lowest levels on record. Growing demand for water and climate change are shrinking the Colorado River, endangering a water source that millions of Americans depend on. Credit: Reuters/Caitlin Ochs)

**WED 17:00 BBC News (w172ykq1p8h3sx2)**  
The latest five minute news bulletin from BBC World Service.

**WED 17:06 BBC OS (w172yg1jkrkt684)**  
Buffalo: Black radio stations react

After the racist attack on a supermarket in a predominantly black neighbourhood of Buffalo, New York, in which 10 people were shot dead, we hear two black American radio hosts talk about the conversations they're having with their listeners.

We follow the story of the evacuations of Ukrainian troops from the steelworks in Mariupol. It's unclear whether they're going to be freed by Russia in return for Russian prisoners, with lawmakers in Russia discussing a legal ban on exchanging Ukrainian fighters.

We get your questions answered on the latest international report on the state of the climate. The global temperature in 2021 didn't break previous records, but other indicators did, like sea level and CO2 concentration in the atmosphere.

And people in India and Pakistan tell us how they're adapting to record heatwaves.

(Photo: A memorial is seen in the wake of a weekend shooting at a Tops supermarket in Buffalo, New York. Credit: Reuters/Brendan McDermid)

**WED 18:00 BBC News (w172ykq1p8h3xn6)**  
The latest five minute news bulletin from BBC World Service.

**WED 18:06 Outlook (w3ct3y8b)**  
[Repeat of broadcast at 12:06 today]

**WED 18:50 Witness History (w3ct3c5g)**  
[Repeat of broadcast at 08:50 today]

**WED 19:00 BBC News (w172ykq1p8h41db)**  
The latest five minute news bulletin from BBC World Service.

**WED 19:06 The Newsroom (w172y17p2nv3d0q)**  
The world's Newsroom brings you global events as they happen

**WED 19:30 BBC News Summary (w172ykqwh8cy7xw)**  
The latest two minute news summary from BBC World Service.

**WED 19:32 Sport Today (w172ygf428dkc7)**  
2022/05/18 GMT

BBC sports correspondents tell the story behind today's top sporting news, with interviews and reports from across the world.

**WED 20:00 BBC News (w172ykq1p8h454g)**  
The latest five minute news bulletin from BBC World Service.

**WED 20:06 The Compass (w3ct42d8)**  
[Repeat of broadcast at 02:32 today]

**WED 20:30 BBC News Summary (w172ykqwh8cycp0)**  
The latest two minute news summary from BBC World Service.

**WED 20:32 Health Check (w3ct32wc)**  
Healthcare provision in North Korea

Reports from North Korea have suggested a scarcity of data on healthcare provision but Claudia hears from Professor Hazel Smith who has researched North Korea for over thirty years that there is good information about health services.

And do doctors have a professional duty to be kind? The General Medical Council in the UK are consulting on whether to require doctors to 'treat patients with kindness' and some have not taken kindly to the idea. Louella Vaughan, a hospital consultant in acute medicine and family doctor Ann Robinson debate the issues.

Plus Claudia's studio guest today is Graham Easton, Professor of Clinical Communication skills at Queen Mary, University of London.

Presenter: Claudia Hammond  
Producer: Erika Wright

(Picture: Pedestrians walk past cherry blossom trees near the Arch of Triumph in Pyongyang in April 2022. Photo credit: Kim Won Jin/AFP/Getty Images.)

**WED 21:00 BBC News (w172ykq1p8h48w1)**  
The latest five minute news bulletin from BBC World Service.

**WED 21:06 Newshour (w172yfbysg86ttw)**  
Russian soldier pleads guilty to war crimes

In Ukraine's first war crimes trial, a Russian soldier has pleaded guilty to shooting dead an unarmed civilian. Our correspondent Sarah Rainsford was in court.

We also hear a rare voice from the Russian-controlled side of the frontline.

Also in the programme: the United States' football governing body agrees to equal pay for the men's and women's national teams.

(Image: Prosecutor Andviy Syniuk speaks to the media after a court hearing for the trial of Russian soldier Vadim Shishimarin, who today pleaded guilty to shooting an unarmed civilian. Kyiv, Ukraine May 18, 2022 / Credit: Reuters / Edgar Su)

**WED 22:00 BBC News (w172ykq1p8h4dmq)**  
The latest five minute news bulletin from BBC World Service.

**WED 22:06 HARDtalk (w3ct32qv)**

[Repeat of broadcast at 08:06 today]

**WED 22:30 BBC News Summary (w172ykqwh8cym58)**

The latest two minute news summary from BBC World Service.

**WED 22:32 The Documentary (w3ct42bq)**

[Repeat of broadcast at 04:32 today]

**WED 23:00 BBC News (w172ykq1p8h4jcv)**

The latest five minute news bulletin from BBC World Service.

**WED 23:06 The Newsroom (w172yrwt765vjff)**

The world's Newsroom brings you global events as they happen

**WED 23:20 Sports News (w172ygh20jgsmf4)**

BBC Sport brings you all the latest stories and results from around the world.

**WED 23:30 BBC News Summary (w172ykqwh8cyqxd)**

The latest two minute news summary from BBC World Service.

**WED 23:32 World Business Report (w172ykb9vfvxjtc)**

Billions of dollars are pledged to end global food shortage

The World Bank has pledged 30 billion dollars to help tackle world hunger over the next 15 years. Professor of Economics at the University of Massachusetts Amherst, US, Jayati Ghosh, gives us her take on whether that amount is enough.

Share prices in the United States have seen their biggest one day drop since 2020. The DOW Jones Industrial Average fell more than three and a half percent. Our Business Correspondent Samira Hussein tells us why.

As things take another turn for the worse in Sri Lanka, the power minister Kanchana Wijesekera says people should stop queuing for fuel - as the country has no money to buy any. Shanta Devarajan who's part of the Sri Lankan team speaking to the IMF, tells us about the negotiations.

Walter Koenig from the Bavaria Brewers Federation tells us about German worries that a shortage of beer bottles there could leave people without their favourite drink.

Image: Dave Thompson/PA Wire

#### THURSDAY 19 MAY 2022

**THU 00:00 BBC News (w172ykq1p8h4n3z)**

The latest five minute news bulletin from BBC World Service.

**THU 00:06 The Documentary (w3ct41wd)**

[Repeat of broadcast at 12:06 on Saturday]

**THU 01:00 BBC News (w172ykq1p8h4rw3)**

The latest five minute news bulletin from BBC World Service.

**THU 01:06 Business Matters (w172ydp5c45s80)**

Will billions of dollars solve global hunger?

Could tens of billions of dollars stop the world's poorest going hungry? The World Bank is hoping cash will help those hardest hit by global food shortages. But with Ukraine and other conflicts creating a squeeze on exports of key commodities, the UN is calling for a political solution.

A landmark deal in the US means women and men will be paid the same for competing in international football tournaments; and we hear about the man taking American fast food giants to court over the size of their portions.

**THU 02:00 BBC News (w172ykq1p8h4wm7)**

The latest five minute news bulletin from BBC World Service.

**THU 02:06 The Newsroom (w172y17p2nv477m)**

The world's Newsroom brings you global events as they happen

**THU 02:30 BBC News Summary (w172ykq402v7wm)**

The latest two minute news summary from BBC World Service.

**THU 02:32 Assignment (w3ct303k)**

Love-bombing Estonia's Russian speakers

Can music and culture help unite Estonia? Guitar riffs lilt through the air and over the narrow river that marks the border

between Estonia and Russia. It's the first time Estonia's annual festival Tallinn Music Week has been held in Narva, bringing coach loads of musicians from 30 countries around the world to a normally sleepy city. The organiser moved the festival when the war in Ukraine broke out in order to send a message of unity and to encourage Estonians from the capital to mix with people in Narva, where 97% of Estonians have Russian as their mother tongue. Many can barely speak Estonian at all.

Across Estonia, one quarter of the population are Russian speakers, prompting many to describe this as a threat. When Putin invaded Ukraine on the premise of liberating Russian speakers there, it led to many in the press to ask 'is Narva next?' but a new generation of Russian speaking Estonians are increasingly frustrated by this rhetoric and say it simply is not true. Russian speakers are even signing up to Estonia's volunteer defence force, ready to fight to defend Estonia should the worst happen. Their allegiance is clear. But is music and culture enough to unite Estonia's Russian speakers?

Presenter: Lucy Ash  
Producer: Phoebe Keane

(Image: Tallinn Music Week festival lights up Kreenholm, an abandoned 19th century textile factory in Narva, on Estonia's border with Russia. Credit: Phoebe Keane/BBC)

Music credits:

Artist: Trad Attack!  
Track: Sõit  
Writers: Jalmar Vabarna, Sandra Vabarna, Tõnu Tubli

Artist: Gameboy Tetris and Nublu  
Track: Für Oksana  
Writers: Pavel Botsarov, Markkus Pulk, Fabry El Androide, Ago Teppand

Artist: Pale Alison  
Track: забавай  
Writers: Evelina Koop, Nikolay Rudakov

Artist: Jaakko  
Sound Installation: On the Border/Rajalla

**THU 03:00 BBC News (w172ykq1p8h50cc)**

The latest five minute news bulletin from BBC World Service.

**THU 03:06 Outlook (w3ct3y8b)**

[Repeat of broadcast at 12:06 on Wednesday]

**THU 03:50 Witness History (w3ct3c5g)**

[Repeat of broadcast at 08:50 on Wednesday]

**THU 04:00 BBC News (w172ykq1p8h543h)**

The latest five minute news bulletin from BBC World Service.

**THU 04:06 The Newsroom (w172y17p2nv4qgw)**

The world's Newsroom brings you global events as they happen

**THU 04:30 BBC News Summary (w172ykq402vhcw)**

The latest two minute news summary from BBC World Service.

**THU 04:32 The Food Chain (w3ct38mt)**

How a stoma changed my life

Thinking about how food passes through your body may not be something that crosses your mind, but for people who have had stoma surgery, they're aware of it at every meal.

Tamasin Ford explores what it's like to live with a stoma bag and how it redefines your relationship with food.

We speak to three women who have had lifesaving operations to have a stoma bag fitted. The surgery tends to involve either the small or large intestine, with a stoma creating an opening on the skin of the abdomen to bypass the normal digestion process. Instead digested content is diverted to a pouch, worn on the outside of your body.

We find out how they learned to eat again after having surgery, what they're doing to fight the stigma around stomas, and how they're embracing their new lives with stoma bags. Joining us are Aisha Islam in Saudi Arabia, Alisa Kuivasto in Finland and Gill Castle in the United Kingdom.

If you would like to get in touch with the show, please email: [thefoodchain@bbc.co.uk](mailto:thefoodchain@bbc.co.uk)

(Picture: Woman with stoma bag. Credit: Getty/BBC)

Producer: Sarah Stolarz  
Presenter: Tamasin Ford

**THU 05:00 BBC News (w172ykq1p8h57vm)**

The latest five minute news bulletin from BBC World Service.

**THU 05:06 Newsday (w172yf8hg8g5wj1)**

Russia's invasion of Ukraine could cause global food shortages

Our top story today: the UN is warning that the war in Ukraine has led to rising food prices and many millions facing hunger around the world. We'll examine just how bad things are - and try to find out what can be done to alleviate the pain.

On Newsday we hear from one country already feeling the economic pinch - Ghana.

We will hear why President Biden is taking drastic measures to address the shortage of powdered baby milk in the United States.

On the programme we have a couple of big sports stories for you - the Europa League final, and US soccer agreeing to pay its male and female players equally.

And the heartwarming story of the 69 year old Ethiopian man who is finally going to university.

**THU 06:00 BBC News (w172ykq1p8h5clr)**

The latest five minute news bulletin from BBC World Service.

**THU 06:06 Newsday (w172yf8hg8g6085)**

How does the war in Ukraine impact the global food supply?

The UN warns that the ongoing war in Ukraine is increasing the risk of a global food shortage and mass hunger. Will Russian President Vladimir Putin heed the calls to end the blockade of grain exports from Ukrainian ports? We will get an expert view from a former Chief Economist at the U.S. Department of Agriculture.

And on Newsday we'll hear about a growing economic crisis around the globe - focusing on the US.

In Afghanistan there is huge concern about how the Taliban are policing every aspect of society - and our correspondent has been meeting the official vice and virtue inspectors.

And we go to Myanmar where the opposition is calling for International military support in their battle with the military regime there.

**THU 07:00 BBC News (w172ykq1p8h5hbw)**

The latest five minute news bulletin from BBC World Service.

**THU 07:06 Newsday (w172yf8hg8g6409)**

Ukraine: How global food security is at risk

The United Nations warns that the war in Ukraine could lead to a global food crisis. We'll be looking at why poorer countries will be the first to suffer. And we'll head to Yemen.

What happens next to the Ukrainian troops from the Azovstal steel works in Mariupol. Taken as prisoners of war by Russia will they get justice?

Nearly 60 million people around the world have been classed as internally displaced after having fled their homes.

And why a Hollywood actor being lauded at the Cannes film festival in France is not to everybody's taste!

**THU 08:00 BBC News (w172ykq1p8h5m30)**

The latest five minute news bulletin from BBC World Service.

**THU 08:06 The Inquiry (w3ct39sy)**

How do pandemics end?

After two really difficult years living in the grip of Covid-19, restrictions are winding down and international borders are opening up in countries around the world. Striking the right balance between the needs of a population fed up with lockdowns and scientists warning we've only reached the end of the beginning is complicated to get right. While it may feel like the worst of Covid-19 has passed, the disease still poses a real threat to us. We ignore this fact at our peril. So, in this week's Inquiry Sandra Kanthal will be asking how pandemics really end.

Produced and presented by Sandra Kanthal  
Editor: Richard Vardon

Guests:  
Dr Margaret Harris, Spokesperson, World Health Organisation  
Nicholas Christakis, Professor of Social and Natural Science, Yale University

Aris Katzourakis, Professor of Evolution and Genomics, University of Oxford  
Dora Vargha, Professor of History and Medical Humanities, University of Exeter

(Covid face mask lying on the ground. Getty images)

**THU 08:30 BBC News Summary (w172ykw402vzed)**  
The latest two minute news summary from BBC World Service.

**THU 08:32 Business Daily (w3ct311n)**  
Spending on defence

Rahul Tandon looks at changing attitudes to defence spending following Russia's invasion of Ukraine. There have been new funding commitments from countries like Germany, while Sweden and Finland now want to join NATO, but what's the true cost?  
We speak to Estonia's defence minister Kalle Laanet about his country's growing military budget, and German member of the European Parliament Viola Von Cramon Taubadel on her country's decision to spend more.  
Dr Diego Lopes Da Silva, a researcher with the Stockholm International Peace Research Institute, says global spending reached a record level of \$2 trillion in 2021, before the invasion of Ukraine.  
Steven Zaloga, a military analyst at the Teal Group, explains the role of cutting edge drone technology, and Allison Pytlak from the Women's International League for Peace and Freedom discusses the human cost of conflict.  
Presenter: Rahul Tandon  
Producer: James Graham  
Photo: Ammunition in a shopping trolley (Credit: Getty Images)

**THU 08:50 Witness History (w3ct3e0y)**  
Shanghai at War

In 1937, Japanese forces entered Shanghai - spelling the end of a period when the Chinese city had been a thriving commercial centre governed by international powers and known as the "Paris of the East". During the eight-year Japanese occupation, local people in Shanghai endured starvation and brutal treatment; while foreigners scrambled to escape as their lifestyle of servants and glamorous parties slowly disappeared. Josephine McDermott speaks to Liliane Willens, who lived through the invasion and occupation of Asia's most international city.

PHOTO: Japanese troops in Shanghai in 1937 (Ullstein Bild via Getty Images)

**THU 09:00 BBC News (w172yqk1p8h5qv4)**  
The latest five minute news bulletin from BBC World Service.

**THU 09:06 Assignment (w3ct303k)**  
[Repeat of broadcast at 02:32 today]

**THU 09:30 BBC News Summary (w172ykw402w33j)**  
The latest two minute news summary from BBC World Service.

**THU 09:32 Health Check (w3ct32wc)**  
[Repeat of broadcast at 20:32 on Wednesday]

**THU 10:00 BBC News (w172yqk1p8h5vl8)**  
The latest five minute news bulletin from BBC World Service.

**THU 10:06 The Forum (w3ct38sb)**  
Eunuchs and empires

Since ancient times the practice of castrating pre-pubescent boys, and sometimes men, was thought to make them loyal servants, suitable for roles at the heart of many imperial courts. Some historians believe this began with human slaves who were treated in the same way as animals – as lesser beings to be managed and controlled – with no free choice.

The effects of castration on the male body – the loss of testosterone being the principal one – had a huge impact on how eunuchs have been viewed throughout history. Being unable to father children who could threaten lines of succession, certain eunuchs rose to power precisely because of their exclusive access to the inner workings of empires. Castrated men were also prized for their singing voices in 17th and 18th century Europe, as Dr Brianna Robertson-Kirkland explains.

Bridget Kendall discusses this painful episode with Norman Kutcher, Professor in the Department of History at the Maxwell School at Syracuse University in the US. He specialises in

imperial Chinese history, and he's the author of Eunuch and Emperor in the Great Age of Qing Rule; Dr Kathryn Reusch, conservation technician at the Denver Museum of Nature and Science, who's published widely on the topic of castration in relation to archaeological remains; and Shaun Tougher, Professor of Late Roman and Byzantine History at Cardiff University. He's written many books and articles on eunuchs, including The Roman Castrati: Eunuchs in the Roman Empire.

Produced by Fiona Clampin for the BBC World Service.

(Photo: A group of court eunuchs in a Tang Dynasty mural from the tomb of Prince Zhanghuai (circa 618-907). Credit: Pictures From History/Universal Images Group via Getty Images)

**THU 10:50 Sporting Witness (w3ct36fh)**  
Ryneldi Becenti - Native American basketball hero

It's 25 years since Ryneldi Becenti became the first Native American to play in the women's NBA when she made her debut for the Phoenix Mercury. Basketball is a big sport on Native American reservations and success made Becenti a hero in her community. In 2019, Lucy Burns spoke to Ryneldi Becenti about her career and her challenging family background.

Photo: Ryneldi Becenti playing for Arizona State University (courtesy Arizona State University)

**THU 11:00 BBC News (w172yqk1p8h5zbd)**  
The latest five minute news bulletin from BBC World Service.

**THU 11:06 The Newsroom (w172y17p2nv59ys)**  
The world's Newsroom brings you global events as they happen

**THU 11:30 BBC News Summary (w172ykw402wbls)**  
The latest two minute news summary from BBC World Service.

**THU 11:32 The Food Chain (w3ct38mt)**  
[Repeat of broadcast at 04:32 today]

**THU 12:00 BBC News (w172yqk1p8h632j)**  
The latest five minute news bulletin from BBC World Service.

**THU 12:06 Outlook (w3ct34vz)**  
The heart of a heart surgeon

Heart surgeon Stephen Westaby has saved thousands of patients throughout his 40 year career but it's the deaths that stick with him. He tells Neal Razzell that as a teenager he was smart, but felt he wasn't bold enough to make the split-second life and death decisions required of a surgeon. It wasn't until medical school when a rugby accident damaged the part of his brain that controls inhibition and risk-taking, that Professor Westaby overcame his shyness. He would later become famous for complex paediatric surgeries and would pioneer the use of a small artificial heart. This interview was first broadcast in July 2019.

Chilean couple Lorena Grez and Claudia Aravena share their daughter's birth story. They both had a big part in it as Lorena donated the egg, which was implanted into Claudia. But at the time of the birth only one of them could legally be recognised as the baby's mother. They tell Outlook's Jane Chambers why they fought to change this.

Presenter: Mobeen Azhar

Get in touch: outlook@bbc.com

(Photo, Stephen Westaby. Credit, Stephen Westaby)

**THU 12:50 Witness History (w3ct3c0y)**  
[Repeat of broadcast at 08:50 today]

**THU 13:00 BBC News (w172yqk1p8h66tn)**  
The latest five minute news bulletin from BBC World Service.

**THU 13:06 The Newsroom (w172y17p2nv5kg1)**  
The world's Newsroom brings you global events as they happen

**THU 13:30 BBC News Summary (w172ykw402wl31)**  
The latest two minute news summary from BBC World Service.

**THU 13:32 Health Check (w3ct32wc)**  
[Repeat of broadcast at 20:32 on Wednesday]

**THU 14:00 BBC News (w172yqk1p8h6bks)**  
The latest five minute news bulletin from BBC World Service.

**THU 14:06 Newshour (w172yfbysg88wj2)**  
UN warns Ukraine invasion could cause global food crisis

The United Nations Secretary General has warned that the war in Ukraine is increasing the risk of a global food shortage, and the possibility of mass hunger. At a UN summit in New York, António Guterres said the Russian invasion had compounded food insecurity, which had already been affected by rising temperatures and the pandemic. We speak to Matthew Hollingworth, Emergency Coordinator and Country Director in Ukraine for World Food Prog.

Also, we hear from a volunteer helping fellow Ukrainian women cope with their new lives in Poland.

Turkey says it will block Sweden and Finland joining NATO and accuses them of harbouring terrorists who threaten the Turkish state. We speak to an advisor to president Erdogan.

And a rare insight into Afghanistan's Ministry of Vice and Virtue.

(Photo credit: Getty Images)

**THU 15:00 BBC News (w172yqk1p8h6g9x)**  
The latest five minute news bulletin from BBC World Service.

**THU 15:06 The Inquiry (w3ct39sy)**  
[Repeat of broadcast at 08:06 today]

**THU 15:30 BBC News Summary (w172ykw402wl9)**  
The latest two minute news summary from BBC World Service.

**THU 15:32 World Business Report (w172yk66msvjzlk)**  
Share market sell-off continues

Investors are worried about possible recession after steep Wall Street falls on Wednesday. We have the latest on the financial markets from Michael Hewson of CMC Markets, and explore the prospects for the global economy with Simon Macadam at Capital Economics in London, and Allison Schrage, senior fellow and economist at the Manhattan Institute in New York. Also in the programme, the BBC's Phil Mercer reports from Australia on how the rising cost of living is a central theme in campaigning ahead of this weekend's general election. The BBC's Rahul Tandon examines changing attitudes to defence spending following Russia's invasion of Ukraine. Plus, we hear how Joe and Jess Thwaite, from Gloucester in England, found out that they had won \$228m on the EuroMillions lottery.

Today's edition is presented by Mike Johnson, and produced by Sarah Hawkins, Sara Parry and Gabriele Shaw.

(Picture: A New York Stock Exchange trader. Picture credit: Getty Images.)

**THU 16:00 BBC News (w172yqk1p8h6d21)**  
The latest five minute news bulletin from BBC World Service.

**THU 16:06 BBC OS (w172y1jkrtrmfz3)**  
War in Ukraine causes food shortages

With the UN warning of a global food crisis over the war in Ukraine, we explain how much wheat Ukraine produces and how the disruption in supplies is affecting other countries, particularly in the Arabic-speaking world.

We hear another conversation about racially motivated hate crimes in the United States and the rise of white supremacy and the far-right following the attack in Buffalo.

Also, President Biden has invoked special powers to address the shortage of baby milk formula. The shortage has prompted health authorities to issue warnings against using homemade formula. We have the latest from our business reporter in New York.

(Photo: A man works on a damaged farm in the village of Mala Rohan, near Kharkiv, Ukraine. Credit: EPA/Sergey Koslov)

**THU 17:00 BBC News (w172yqk1p8h6pt5)**  
The latest five minute news bulletin from BBC World Service.

**THU 17:06 BBC OS (w172yg1jkrtn357)**  
Buffalo: Tackling white supremacy

After the racist attack in a predominantly black neighbourhood

of Buffalo, New York, we hear another conversation about racially motivated hate crimes in the United States and the rise of white supremacy and the far-right. The suspect, who is white, allegedly posted a manifesto online and livestreamed the fatal shooting of 10 people at a supermarket.

Also, President Biden has invoked special powers to address the shortage of baby milk formula. The shortfall has prompted health authorities to issue warnings against using homemade formula. We have the latest from our business reporter in New York.

We also hear about the UN's warning of a global food crisis over the war in Ukraine. We explain how much wheat Ukraine produces and how the disruption in supplies is affecting other countries, particularly in the Arabic-speaking world.

(Photo: People hugging at a memorial in Buffalo, New York. Credit: Reuters/Brendan McDermid)

**THU 18:00 BBC News (w172ykq1p8h6tk9)**  
The latest five minute news bulletin from BBC World Service.

**THU 18:06 Outlook (w3ct34vz)**  
[Repeat of broadcast at 12:06 today]

**THU 18:50 Witness History (w3ct3c0y)**  
[Repeat of broadcast at 08:50 today]

**THU 19:00 BBC News (w172ykq1p8h6y9f)**  
The latest five minute news bulletin from BBC World Service.

**THU 19:06 The Newsroom (w172yl7p2nv68xt)**  
The world's Newsroom brings you global events as they happen

**THU 19:30 BBC News Summary (w172ykw402x9kt)**  
The latest two minute news summary from BBC World Service.

**THU 19:32 Sport Today (w172ygf428hg8b)**  
2022/05/19 GMT

BBC sports correspondents tell the story behind today's top sporting news, with interviews and reports from across the world.

**THU 20:00 BBC News (w172ykq1p8h721k)**  
The latest five minute news bulletin from BBC World Service.

**THU 20:06 Assignment (w3ct303k)**  
[Repeat of broadcast at 02:32 today]

**THU 20:30 BBC News Summary (w172ykw402xf9y)**  
The latest two minute news summary from BBC World Service.

**THU 20:32 Science In Action (w3ct368z)**  
Death in the rainforest

Tree mortality in tropical moist forests in Australia has been increasing since the mid 1980s. The death rate of trees appears to have doubled over that time period. According to an international team of researchers, the primary cause is drier air in these forests, the consequence of human-induced climate change. According to ecologist David Bauman, a similar process is likely underway in tropical forests on other continents.

Also in the programme: the outbreaks of monkeypox in Europe and North America... Could SARS-CoV-2 infection lingering in the gut be a cause of Long Covid? News of a vaccine against Epstein Barr virus, the cause of mononucleosis, various cancers and multiple sclerosis.

Image:  
Credit: Getty Images

Presenter: Roland Pease  
Producer: Andrew Luck-Baker

**THU 21:00 BBC News (w172ykq1p8h75sp)**  
The latest five minute news bulletin from BBC World Service.

**THU 21:06 Newshour (w172yfbysg89qz)**  
Finland and Sweden to join NATO: Turkey objects

All thirty current NATO members have to approve membership for Sweden and Finland but one country - Turkey - is threatening to exercise its veto, accusing the two Nordic neighbours of harbouring Kurdish militants.

Also on the programme: the UN security council meets to discuss the global food shortage caused by the war in Ukraine; we hear from a Ukrainian farmer desperate to get his grain to market; and why the Dutch prime minister is in trouble for using an old Nokia phone.

(Photo: A member of the Norwegian army participates in a military exercise called "Cold Response 2022", gathering around 30,000 troops from NATO member countries as well as Finland and Sweden Credit: REUTERS/Yves Herman)

**THU 22:00 BBC News (w172ykq1p8h79jt)**  
The latest five minute news bulletin from BBC World Service.

**THU 22:06 The Inquiry (w3ct39sy)**  
[Repeat of broadcast at 08:06 today]

**THU 22:30 BBC News Summary (w172ykw402xnt6)**  
The latest two minute news summary from BBC World Service.

**THU 22:32 The Food Chain (w3ct38mt)**  
[Repeat of broadcast at 04:32 today]

**THU 23:00 BBC News (w172ykq1p8h7f8y)**  
The latest five minute news bulletin from BBC World Service.

**THU 23:06 The Newsroom (w172yrtw765yfbj)**  
The world's Newsroom brings you global events as they happen

**THU 23:20 Sports News (w172ygh20jgwjb7)**  
BBC Sport brings you all the latest stories and results from around the world.

**THU 23:30 BBC News Summary (w172ykw402xskb)**  
The latest two minute news summary from BBC World Service.

**THU 23:32 World Business Report (w172yk712jg8709)**  
Ukraine's wheat exports

The United States Secretary of State, Anthony Blinken, accuses Russia of using food as a weapon of war - holding "hostage" food supplies that are usually exported to millions of people. Daniil Melnychenko is a data analyst at Informall Business Group - based in Odessa - he tells us about the issue. Indonesia will resume palm oil exports next week - one of the world's most important commodities. Norman Harsono has been covering the story for the Jakarta Post - he tells us why the President has changed his mind. Australia's recorded its lowest unemployment figure in almost fifty years - just 3.9% last month. Businesses say they're desperate for staff - and Liam Peck, who owns the Matterhorn Restaurant in Sydney tells us about the problems she's facing.

#### FRIDAY 20 MAY 2022

**FRI 00:00 BBC News (w172ykq1p8h7k12)**  
The latest five minute news bulletin from BBC World Service.

**FRI 00:06 The Forum (w3ct38sb)**  
[Repeat of broadcast at 10:06 on Thursday]

**FRI 00:50 Sporting Witness (w3ct36fh)**  
[Repeat of broadcast at 10:50 on Thursday]

**FRI 01:00 BBC News (w172ykq1p8h7ns6)**  
The latest five minute news bulletin from BBC World Service.

**FRI 01:06 Business Matters (w172ydp5c48p53)**  
Russia accused of weaponising food in Ukraine war

Vivienne Nunis is joined by Alexander Kaufman from the Huff Post in New York, and Jeanette Rodrigues from Bloomberg in Mumbai.

We start with the war in Ukraine and the ripple effects it's having on global food supplies. Plus we look at Indonesia resuming palm oil exports next week - one of the world's most important commodities. The leader of the US House of Representatives Nancy Pelosi again warns that the US will not support a bilateral free trade

agreement if the UK does anything to undermine the Good Friday Agreement. Plus after another volatile day on the markets, we try to work out whether the US is heading towards a recession.

Image credit: Volunteers prepare food in the kitchen of "World Central Kitchen" for war refugees from Ukraine staying in Przemysl, Poland, 15 April 2022. EPA/DAREK DELMANOWICZ POLAND

**FRI 02:00 BBC News (w172ykq1p8h7sjb)**  
The latest five minute news bulletin from BBC World Service.

**FRI 02:06 The Newsroom (w172yl7p2nv744q)**  
The world's Newsroom brings you global events as they happen

**FRI 02:30 BBC News Summary (w172ykw402y4sq)**  
The latest two minute news summary from BBC World Service.

**FRI 02:32 World Football (w3ct3hq1)**  
Martin Laursen, AC Milan and the women's Champions League final

The former Former AC Milan, Aston Villa and Denmark defender Martin Laursen looks ahead to the finale of the Serie A season and shares memories of his time playing in Italy. And we look ahead to the final of the women's Champions League final between Barcelona and Lyon with the former Barcelona coach Lluís Cortes.

Picture on website: Martin Laursen returns to Villa Park for a match between Aston Villa and Blackburn Rovers (Neville Williams/Aston Villa FC via Getty Images)

**FRI 03:00 BBC News (w172ykq1p8h7x8g)**  
The latest five minute news bulletin from BBC World Service.

**FRI 03:06 Outlook (w3ct34vz)**  
[Repeat of broadcast at 12:06 on Thursday]

**FRI 03:50 Witness History (w3ct3c0y)**  
[Repeat of broadcast at 08:50 on Thursday]

**FRI 04:00 BBC News (w172ykq1p8h810l)**  
The latest five minute news bulletin from BBC World Service.

**FRI 04:06 The Newsroom (w172yl7p2nv7cmz)**  
The world's Newsroom brings you global events as they happen

**FRI 04:30 BBC News Summary (w172ykw402y8z)**  
The latest two minute news summary from BBC World Service.

**FRI 04:32 Heart and Soul (w3ct4237)**  
Finding faith on a warship

BBC Faith and Ethics reporter Claire Jones has been granted exclusive access on board British warship HMS Northumberland while on deployment to the North Sea.

As Russian troops continue to invade Ukraine, Claire explores faith on a warship, and whether armed forces personnel can 'find their faith' in times of trouble or unrest.

The military chaplain onboard the warship is Reverend Dr Louisa Pittman, one of three female chaplains in the Royal Navy. She caters for all faiths, never carries a weapon, and holds no rank so the captain or a junior rating can speak freely.

Claire follows her as she carries out her duties and hears from sailors onboard about what their faith means to them in times of conflict.

**FRI 05:00 BBC News (w172ykq1p8h84rq)**  
The latest five minute news bulletin from BBC World Service.

**FRI 05:06 Newsday (w172yf8hg8g8sf4)**  
Biden to visit South Korea and Japan to reaffirm alliance

Our top story today: the US President Joe Biden begins a six day visit to South Korea and Japan - his first trip to Asia since he took office. But the focus will be on two countries he will not set foot in - North Korea and China.

We'll hear about what binds political right wingers in the US and their counterparts in Hungary - as they meet at a major conference in the European country.

There's an outbreak of the disease Monkeypox in parts of Europe and the US - an unusual occurrence.

And our correspondent reports from Estonia, where efforts to integrate the country's Russian minority have been given a new impetus by Moscow's invasion of Ukraine.

**FRI 06:00 BBC News (w172ykq1p8h88hv)**

The latest five minute news bulletin from BBC World Service.

**FRI 06:06 Newsday (w172yf8hg8g8x58)**

South Korea and Japan receive a visit from President Biden

US President Joe Biden is on a charm offensive to Asia this weekend. His visit to South Korea and Japan is also seen as a firm message to China to not try what Russia did in Ukraine anywhere in Asia. We will get more on that in this next hour.

The migrant deal between the UK and Rwanda continues to cause discomfort and controversy. Why are migrants in northern France worried about it?

The UN is hard at work trying to end the deadly violence that has gripped communities in the disputed oil region of Abyei - We will find out why there is a resurgence of violent clashes there.

**FRI 07:00 BBC News (w172ykq1p8h8d7z)**

The latest five minute news bulletin from BBC World Service.

**FRI 07:06 Newsday (w172yf8hg8g90xd)**

Biden shakes up China and North Korea with East Asia visit

President Biden visits Seoul, it is a part of a trip to South Korea and Japan over the next few days. It is also the first time he has been to Asia since he became President. So what's the message he's bringing?

A day after the world is warned the war in Ukraine could lead to food shortages - our correspondents reports from port city of Odessa from where many basic commodities start their journey to our food cupboards.

Also we look at why despite sanctions, Russia still benefits from it's oil exports.

**FRI 08:00 BBC News (w172ykq1p8h8j03)**

The latest five minute news bulletin from BBC World Service.

**FRI 08:06 HARDtalk (w3ct32ft)**

Franklin Graham: An era of moral decline

Stephen Sackur speaks to evangelist Franklin Graham, who has followed in his father Billy's footsteps and become one of the biggest Christian preachers in America. In the intensifying culture war over abortion and LGBTQ rights in the US, have the evangelists and the Republicans joined forces?

**FRI 08:30 BBC News Summary (w172ykqw402yw8h)**

The latest two minute news summary from BBC World Service.

**FRI 08:32 Business Daily (w3ct30rm)**

Million by 30: Ally Salama

Ally Salama's company makes content that aims to improve mental health awareness in the Middle East - he's experienced clinical depression himself.

The podcast Ally presents - Empathy always wins - has had millions of downloads and EMPWR is valued at more than a million dollars.

In this episode of Million by 30, Felicity Hannah asks Ally how his own experiences helped him develop his business model, how he operates as an employer and for his advice to anyone else looking to get into podcasting or start a media company.

Presenter: Felicity Hannah  
Producer: Rory Claydon

Image: Ally Salama: Credit: Ally Salama

**FRI 08:50 Witness History (w3ct3bwf)**

Chasing the Marcos millions

The former president of the Philippines Ferdinand Marcos Senior is thought to have plundered a huge amount of public money during military rule in the 1970s and '80s. He spent the fortune on foreign properties and the luxury lifestyle enjoyed by his wife, Imelda Marcos. American lawyer Robert Swift has

spent decades trying to recover that money so it can be paid out as compensation to the thousands of Filipinos who were imprisoned or tortured during martial law. He spoke to Matt Pintos.

(Photo: Imelda Marcos and Ferdinand Marcos Senior in Manila in 1977. Credit: Getty Images)

**FRI 09:00 BBC News (w172ykq1p8h8mr7)**

The latest five minute news bulletin from BBC World Service.

**FRI 09:06 Tech Tent (w3ct3752)**

Is the cryptocurrency bubble bursting?

This week Tech Tent takes the temperature of the crypto market with the BBC's cyber reporter Joe Tidy and the Financial Times' Markets Editor, Katie Martin. Dr Johnny Ryan from the Irish Council for Civil Liberties on how our personal data is sold hundreds of times a day; and Rebecca Romo Teague, a radio host from Cape Cod, on how social media is helping with the US baby formula milk crisis.

**FRI 09:30 BBC News Summary (w172ykqw402z00m)**

The latest two minute news summary from BBC World Service.

**FRI 09:32 Science In Action (w3ct368z)**

[Repeat of broadcast at 20:32 on Thursday]

**FRI 10:00 BBC News (w172ykq1p8h8rhc)**

The latest five minute news bulletin from BBC World Service.

**FRI 10:06 The Real Story (w3ct33nw)**

What is the 'Great Replacement' conspiracy theory?

The suspect in Saturday's killing of ten people at a Buffalo supermarket allegedly wrote a document endorsing the Great Replacement Theory. It's a racist far-right conspiracy theory that falsely states there's a secret plan to replace white people through increased immigration and other means. In the United States some politicians and mainstream media figures like Tucker Carlson of Fox News are accused of pushing a version of the theory when they insist Democratic Party immigration policies have the same aim. In Europe too, fears that white, Christian culture is being undermined have been stoked by far-right politicians across the continent. So how has Great Replacement Theory evolved? Is the basic philosophy behind it going mainstream? And what can and should be done to address the fears of people concerned about demographic change?

Ritula Shah is joined by a panel of expert guests.

Producers: Paul Schuster and Ellen Otzen.

**FRI 11:00 BBC News (w172ykq1p8h8w7h)**

The latest five minute news bulletin from BBC World Service.

**FRI 11:06 The Newsroom (w172yl7p2nv86vw)**

The world's Newsroom brings you global events as they happen

**FRI 11:30 BBC News Summary (w172ykqw402z7hw)**

The latest two minute news summary from BBC World Service.

**FRI 11:32 World Football (w3ct3hq1)**

[Repeat of broadcast at 02:32 today]

**FRI 12:00 BBC News (w172ykq1p8h8zmm)**

The latest five minute news bulletin from BBC World Service.

**FRI 12:06 The Fifth Floor (w3ct37z5)**

Love in a time of war

Love in a time of war

How do you arrange a wedding in a warzone? According to Ukrainian authorities nearly 4,000 couples tied the knot in the first 10 days after the invasion. BBC Ukrainian's Zhanna Bezpiatchuk has recently come back from Ukraine - where she met a couple who exchanged their vows as twin rockets hit the city of Lviv, in western Ukraine.

Videogames in the Arabic world

Millions of people around the world play videogames and the industry is getting bigger and bigger. One company is capitalising on this growth. Based in Jordan, their speciality is 'localising' videogames; making them more suitable for Arab audiences. Hossam Fazulla has been covering this story for BBC Arabic.

Meet the Nigerian Spiderman

Environmentalist Jonathan Olakunle dresses up as a superhero to help clean up the streets and raise awareness about illegal waste dumping. BBC Africa's Joshua Akinyemi has spent a day with him.

Afghan women lawyers

Since the Taliban took over in 2021, women have been barred from working in the judiciary system, leaving thousands jobless and at risk. And whilst the Taliban government say women with legal claims can still go to court, some Afghan women say that their cases are better understood by female judges and lawyers. Shazia Haya from BBC Pashto has the story.

Bridgerton in India

The latest season of the drama Bridgerton has had a mixed reception in India. Set in Georgian London, the series follows the aristocratic Bridgerton family. The second series introduces an Indian family visiting London to find a match for their youngest daughter. Though popular among Indians it proved controversial - as the BBC's Meryl Sebastian in Delhi explains.

Presenter: Faranak Amidi

Producers: Alice Gioia, Caroline Ferguson, Rebecca Moore, Emily Naylor

(Photo: Newly-weds Aliona and Boghdan. Credit: Marek Polaszewski)

**FRI 12:50 Witness History (w3ct3bwf)**

[Repeat of broadcast at 08:50 today]

**FRI 13:00 BBC News (w172ykq1p8h93qr)**

The latest five minute news bulletin from BBC World Service.

**FRI 13:06 The Newsroom (w172yl7p2nv8ge4)**

The world's Newsroom brings you global events as they happen

**FRI 13:30 BBC News Summary (w172ykqw402zh04)**

The latest two minute news summary from BBC World Service.

**FRI 13:32 Science In Action (w3ct368z)**

[Repeat of broadcast at 20:32 on Thursday]

**FRI 14:00 BBC News (w172ykq1p8h97gw)**

The latest five minute news bulletin from BBC World Service.

**FRI 14:06 Newshour (w172yfbysg8cfs5)**

Ukraine war: US warns Russia against food blockade

The Ukraine war turns from a conflict about land and about values into a worldwide warning that food may run short for millions.

The US ambassador to the United Nations, Linda Thomas-Greenfield, tells this programme about what she thinks can be done about it and how far the US prepared is to go.

Also in this edition of Newshour: we hear from a pro-democracy activist in Egypt now entering his eighth week of hunger strike; and the Irish artist whose sculpture of a mythical mischief-maker made all sorts of trouble for him.

(Photo shows US ambassador to the United Nations Linda Thomas-Greenfield. Credit: John Minchillo/Reuters)

**FRI 15:00 BBC News (w172ykq1p8h9c70)**

The latest five minute news bulletin from BBC World Service.

**FRI 15:06 HARDtalk (w3ct32ft)**

[Repeat of broadcast at 08:06 today]

**FRI 15:30 BBC News Summary (w172ykqw402zqhd)**

The latest two minute news summary from BBC World Service.

**FRI 15:32 World Business Report (w172yk2xvfwfmsx)**

Canada blocks Huawei and ZTE from 5G networks

Canada will block two of China's biggest telecom equipment firms from its 5G networks. The move to exclude ZTE and Huawei brings Canada in line with its intelligence partners in the US, UK, Australia and New Zealand. We ask Canadian technology journalist Takara Small why the country took a long time to impose the ban. Also in the programme, food delivery drivers in the United Arab Emirates have been on strike, concerned at the rising price of petrol. We find out more from the BBC's Sameer Hashmi. With Europe attempting to wean itself off Russian energy following the invasion of Ukraine,

coal power stations have increased output in recent months. The BBC's George Thomas reports on how it will impact the continent's ambitious targets to end coal power generation by the middle of the decade. Plus, following the death of the Greek film composer Vangelis, who among other things created the famous theme tune for Chariots of Fire, we examine his legacy with the Athens-based journalist Nikki Kitsantonis.

Today's edition is presented by Mike Johnson, and produced by Sarah Hawkins, Faarena Masud, and Elizabeth Hotson.

(Picture: A Huawei logo. Picture credit: Getty Images.)

**FRI 16:00 BBC News (w172ykq1p8h9gz4)**

The latest five minute news bulletin from BBC World Service.

**FRI 16:06 BBC OS (w172yg1jkrqtwb6)**

Cost of living crisis: Lebanon

Ukraine's president has said Russian forces have "completely destroyed" the eastern Donbass region. We speak to our experts about how Russia is pushing forward there, and reportedly withdrawing forces from Mariupol, in order to focus on the east.

Experts warn that North Korea is facing a Covid disaster with the spread of the virus in an unvaccinated population. We hear what is known about North Korea's health-care system and the country's ability to deal with the outbreak.

We hear from our correspondent who's had an exclusive access to facilities in Rwanda that will host refugees from the UK. The two countries have struck a deal to move some of the people who are coming to Britain illegally to be processed and settled in Rwanda.

And we continue to look at the cost of living crisis around the world. Today we connect with our correspondent in Lebanon and hear from local people who share the impact of the country's severe economic crisis and high living costs on their lives.

(Photo: Bank customers clash with Lebanese army soldiers during a protest outside the Lebanese parliament in Beirut, Lebanon, 26 April 2022. Credit: EPA/WAEL HAMZEH)

**FRI 17:00 BBC News (w172ykq1p8h9lq8)**

The latest five minute news bulletin from BBC World Service.

**FRI 17:06 BBC OS (w172yg1jkrtr02b)**

Floods in Indian state of Assam

Flooding and landslides in the Indian State of Assam have killed at least seven people and left more than thirty thousand displaced. India's weather office has forecast more heavy rain in the coming days. Assam regularly faces flooding during the monsoon season but experts say climate change has increased the frequency and intensity of the floods. We speak to our reporter in India, and hear from people affected by the flooding.

Ukraine's president has said Russian forces have "completely destroyed" the eastern Donbass region. We speak to our experts about how Russia is pushing forward there and reportedly withdrawing forces from Mariupol to focus on the east. And we hear how some people in Russia are risking fines and prison terms by voicing their opposition to the invasion of Ukraine.

We hear from our correspondent who's had an exclusive access to facilities in Rwanda that will host refugees from the UK. The two countries have struck a deal to move some of the people who are coming to Britain illegally to be processed and settled in Rwanda.

(Photo: Indian people wade through a flooded street during heavy rainfall after the cyclone Tauktae hit in Ahmedabad, Gujarat, India, 18 May 2021. Credit: EPA/DIVYAKANT SOLANKI)

**FRI 18:00 BBC News (w172ykq1p8h9ggd)**

The latest five minute news bulletin from BBC World Service.

**FRI 18:06 The Fifth Floor (w3ct37z5)**

[Repeat of broadcast at 12:06 today]

**FRI 18:50 Witness History (w3ct3bwf)**

[Repeat of broadcast at 08:50 today]

**FRI 19:00 BBC News (w172ykq1p8h9v6j)**

The latest five minute news bulletin from BBC World Service.

**FRI 19:06 The Newsroom (w172ylp2nv95tx)**

The world's Newsroom brings you global events as they happen

**FRI 19:30 BBC News Summary (w172ykqw40306gx)**

The latest two minute news summary from BBC World Service.

**FRI 19:32 Sport Today (w172ygf428lc5f)**

2022/05/20 GMT

BBC sports correspondents tell the story behind today's top sporting news, with interviews and reports from across the world.

**FRI 20:00 BBC News (w172ykq1p8h9yyn)**

The latest five minute news bulletin from BBC World Service.

**FRI 20:06 Tech Tent (w3ct3752)**

[Repeat of broadcast at 09:06 today]

**FRI 20:30 BBC News Summary (w172ykqw4030b71)**

The latest two minute news summary from BBC World Service.

**FRI 20:32 CrowdScience (w3ct3j6v)**

Why does ancient stuff get buried?

Digging and excavating are bywords for archaeology. But why does history end up deep under our feet?

This question struck CrowdScience listener Sunil in an underground car park. Archaeological remains found during the car park's construction were displayed in the subterranean stairwells, getting progressively older the deeper he went. How had these treasures become covered in so much soil over the centuries?

CrowdScience visits Lisbon, the capital of Portugal – and home to the above-mentioned multi-storey car park. The city has evidence of human habitation stretching back into prehistory, with remnants of successive civilisations embedded and jumbled up below today's street level. Why did it all end up like this?

Human behaviour is one factor, but natural processes are at work too. Over at Butser Ancient Farm, an experimental archaeology site in the UK, we explore the myriad forces of nature that cover up – or expose - ancient buildings and artefacts over time.

Contributors:

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Dr Matt Pope, University College London

Presented by Marnie Chesterton, Produced by Cathy Edwards for the BBC World Service.

IMAGE: Getty Images

**FRI 21:00 BBC News (w172ykq1p8hb2ps)**

The latest five minute news bulletin from BBC World Service.

**FRI 21:06 Newshour (w172yfbysg8dmn2)**

Interviews, news and analysis of the day's global events.

**FRI 22:00 BBC News (w172ykq1p8hb6fx)**

The latest five minute news bulletin from BBC World Service.

**FRI 22:06 HARDtalk (w3ct32ft)**

[Repeat of broadcast at 08:06 today]

**FRI 22:30 BBC News Summary (w172ykqw4030kq9)**

The latest two minute news summary from BBC World Service.

**FRI 22:32 World Football (w3ct3hq1)**

[Repeat of broadcast at 02:32 today]

**FRI 23:00 BBC News (w172ykq1p8hb61)**

The latest five minute news bulletin from BBC World Service.

**FRI 23:06 The Newsroom (w172yrwt7661b7m)**

The world's Newsroom brings you global events as they happen

**FRI 23:20 Sports News (w172ygh20jgzf7b)**

BBC Sport brings you all the latest stories and results from around the world.

**FRI 23:30 BBC News Summary (w172ykqw4030pgf)**

The latest two minute news summary from BBC World Service.

**FRI 23:32 World Business Report (w172yk3r9m1lx67)**

First broadcast 20/05/2022 22:32 GMT

The latest business and finance news from around the world, on the BBC.