

SATURDAY 26 NOVEMBER 2016

SAT 19:00 India's Frontier Railways (b05nhjht)
The Samjhauta Express

Freedom came to the subcontinent in August 1947. The British hastily partitioned British India before they left. Independence was attended by a million deaths and 14 million people were displaced.

Yet despite three wars, Pakistan and Indian railways have established a cross-border train, known as the Samjhauta Express - Samjhauta meaning agreement.

Amongst the passengers on the Samjhauta Express from Lahore to Delhi are Bilal and his father Abiz. Seventeen-year-old Bilal was the victim of an accident which damaged his eye. Unable to source the right treatment in Pakistan, father and son trawled the internet and finally found a suitable clinic. But it was in India. They have never stepped outside Pakistan, so they are a little nervous. Will they be successful in getting Bilal's eye treated?

Also on the train is Rahat Khan, the hockey queen. She's a Pakistan international and a railway hockey champion. She is travelling with her Pakistan girls' hockey team to play a match in India. But not everything goes to plan.

For the Sikh community, the Punjab is home. The golden temple of Amritsar is the holy of holies. But each year, on Guru Nanak's birthday, the railway runs special trains across the border to the guru's birthplace in Pakistan, despite the security concerns.

SAT 20:00 Britain's Lost Waterlands: Escape to Swallows and Amazons Country (b07k18jf)

Documentary which follows presenters Dick Strawbridge and Alice Roberts as they explore the spectacular British landscapes that inspired children's author Arthur Ransome to write his series Swallows and Amazons.

The landscapes he depicted are based on three iconic British waterlands. The beauty and drama of the Lake District shaped by ancient glaciers and rich in wildlife and natural resources, the shallow man-made waterways of the Norfolk broads so crucial to farming and reed production, and the coastal estuaries and deep-water harbours of the Suffolk coastline shaped by ferocious tides and crucial to trade.

Engineer and keen sailor Dick uses vintage boats to explore the landscapes and meet people whose lives are shaped by the water, while wildlife enthusiast Alice explores the rich shorelines, interrogating the underlying geography and meeting the wildlife. Together they evoke the nostalgia of Ransome's writing and a bygone era of childhood freedom and adventure, but they also explore the economic significance of these special locations and the ways in which water was harnessed to change the course of British history.

SAT 21:00 Modus (b0644fcy)

Series 1

Episode 1

During a snowy Christmas season in Sweden, psychologist and criminal profiler Inger Johanne Vik finds herself and her autistic daughter drawn into an investigation surrounding a series of brutal killings.

Inger's elder daughter Stina becomes an unwitting witness to a murder while attending a wedding reception with her family. The killer is now after her, but that is only the beginning.

In Swedish and English, with English subtitles.

SAT 21:45 Modus (b065f3rj)

Series 1

Episode 2

Detective Ingvar Nyman of the Swedish national police force is dispatched to Uppsala to investigate the shocking killing of Bishop Elisabeth Lindgren. Meanwhile, the partner of murdered TV chef Isabella Levin is frantically trying to track her down and young witness Stina Vik is haunted by the memories of what she saw.

In Swedish and English, with English subtitles.

SAT 22:30 Horizon (b00vv0w8)

2010-2011

Asteroids - The Good, the Bad and the Ugly

Famed for their ability to inflict Armageddon from outer space,

asteroids are now revealing the secrets of how they are responsible for both life and death on our planet.

Armed with an array of powerful telescopes, scientists are finding up to 3,000 new asteroids every night. And some are heading our way.

But astronomers have discovered that it's not the giant rocks that are the greatest danger - it's the small asteroids that pose a more immediate threat to Earth.

Researchers have explained the photon propulsion that send these rocks across space, and have discovered that some asteroids are carrying a mysterious cargo of frost and ice across the solar system that could have helped start life on Earth.

SAT 23:30 Classic Soul at the BBC (b0074pvv)

A collection of some of the greatest soul performances from the BBC's archive, featuring Aretha Franklin, Al Green, Dusty Springfield, Isaac Hayes, Solomon Burke and Percy Sledge.

SAT 00:30 Northern Soul: Living for the Weekend (b04bf1lf)

The northern soul phenomenon was the most exciting underground British club movement of the 70s. At its high point, thousands of disenchanted white working class youths from the north of England danced to obscure, mid-60s Motown-inspired sounds until the sun rose. A dynamic culture of fashions, dance moves, vinyl obsession and much more grew up around this - all fuelled by the love of rare black American soul music with an express-train beat.

Through vivid first-hand accounts and rare archive footage, this film charts northern soul's dramatic rise, fall and rebirth. It reveals the scene's roots in the mod culture of the 60s and how key clubs like Manchester's Twisted Wheel and Sheffield's Mojo helped create the prototype that would blossom in the next decade.

By the early 70s a new generation of youngsters in the north were transforming the old ballrooms and dancehalls of their parents' generation into citadels of the northern soul experience, creating a genuine alternative to mainstream British pop culture. This was decades before the internet, when people had to travel great distances to enjoy the music they felt so passionate about.

Set against a rich cultural and social backdrop, the film shows how the euphoria and release that northern soul gave these clubbers provided an escape from the bleak reality of their daily lives during the turbulent 70s. After thriving in almost total isolation from the rest of the UK, northern soul was commercialised and broke nationwide in the second half of the 70s. But just as this happened, the once-healthy rivalry between the clubs in the north fell apart amidst bitter in-fighting over the direction the scene should go.

Today, northern soul is more popular than ever, but it was back in the 70s that one of the most fascinating and unique British club cultures rose to glory. Contributors include key northern soul DJs like Richard Seafaring, Ian Levine, Colin Curtis and Kev Roberts alongside Lisa Stansfield, Norman Jay, Pete Waterman, Marc Almond, Peter Stringfellow and others.

SAT 01:30 Top of the Pops (b083hsd2)

Peter Powell presents the weekly chart show, first broadcast on 9 September 1982. Includes Evelyn King, Gillan, Dire Straits, Survivor, David Christie and Shakin' Stevens. Also includes a dance performance from Zoo.

SAT 02:05 Top of the Pops (b083xvvg)

Simon Bates presents the weekly chart show, first broadcast on 16 September 1982. Includes appearances from Mari Wilson, Simple Minds, Shakatak, The Jam, Adam Ant and Survivor. Also includes a dance performance from Zoo.

SAT 02:45 Classic Soul at the BBC (b0074pvv)

[Repeat of broadcast at 23:30 today]

SUNDAY 27 NOVEMBER 2016

SUN 19:00 Virtuoso Violinists at the BBC (b072x1qh)

Violinist Nicola Benedetti explores 60 years of BBC archive to celebrate the world of the violin and its most outstanding performers. From Nathan Milstein, Mischa Elman and Isaac Stern to Yehudi Menuhin, Itzhak Perlman and Nigel Kennedy, Nicola gives us a violinist's perspective on what makes a great performance in a tradition which stretches back to the 19th-century virtuoso Paganini. Filmed at the Royal Academy of Music Museum, London.

SUN 20:00 Classic Albums (b007b6hv)

Paul Simon: Graceland

Since its release in 1986, Paul Simon's Graceland has had an enormous impact on rock music with its blend of rock and African rhythms. Simon and engineer Roy Halee demonstrate the multi-tracking and mixing of the album and reveal the inspiration behind the songs, and composer Philip Glass assesses the album's place in musical history. Featuring interviews with major artists involved in the album, including Joseph Shabalala of Ladysmith Black Mambazo and guitarist Ray Phiri, who shatter the myth about their relationship with Simon.

SUN 21:00 World War II: 1945 and the Wheelchair President (b05vlnzn)

David Reynolds re-examines the war leadership of American president Franklin Roosevelt.

At the height of war, Roosevelt inspired millions with stirring visions of a new and better postwar world, but it was a world he probably knew he would never see. He was commander-in-chief of the greatest military power the world had known, and yet his paralysis from polio made him powerless to accomplish even the most minor physical tasks. Few Americans knew the extent of his disability.

In this intimate biography set against the epic of World War II, Reynolds reveals how Roosevelt was burdened by secrets about his failing health and strained marriage that, if exposed, could have destroyed his presidency. Enigmatic, secretive and with a complicated love life, America's wheelchair president was racing to shape the future before the past caught up with him.

Weaving together the conduct of the war in Europe and the Pacific, the high politics of Roosevelt's diplomacy with Stalin and Churchill, and the entangled stories of the women who sustained the president in his last year, Reynolds explores the impact of Roosevelt's growing frailty on the war's endgame and the tainted peace that followed.

SUN 22:30 Storyville (b0845j51)

Brides for Sale - Sonita

This absorbing Storyville tells the inspirational story of a teenage girl pursuing her dreams against the odds. Sonita dreams of being a rap star performing for adoring fans, but as an 18-year-old illegal Afghan immigrant living in the poor suburbs of Tehran, opportunities are hard to come by.

Undeterred, Sonita pursues her dream, and with her friend Ahmad finds a recording company prepared to risk an unauthorised rap song that includes an illegal female solo, only to have their plans thwarted by Sonita's family. One of her brothers wants to get married, so Sonita must return to Afghanistan and be sold into marriage herself. The bride price she fetches will pay for her brother's wife.

Feisty, defiant and spirited Sonita continues the fight to live life her own way and overcome the many obstacles in her path, experiences which are powerfully and unflinchingly captured in her music.

SUN 23:30 FKA twigs: Soundtrack 7 (b084j3r9)

Shot on location for the Manchester International Festival, this film shows the work twigs created and filmed one per day during her week-long residency. Conceptualized as an abstract autobiographical piece, Soundtrack 7 includes performances set to How's That, Ultraviolet, and Good to Love among others, and is bound together by a striking, repeated recitation of Thomas Wyatt's poem I Find No Peace (an excerpt from which opened twigs's critically acclaimed LP1). Emphasising the grit and physicality of dance, twigs describes her latest project as 'Flesh, sweat, feeling, muscle, and a live movement, no air brushing, no frills.'

SUN 00:05 Monkey Planet (p01s0yd4)

Meet the Family

Our primate family is incredibly varied and surprising. From the ninja tarsier, a spring-loaded ambush predator the size of a tennis ball, to the magnificent herds of geladas in the mountains of Ethiopia, primates have adapted to environments across the planet.

In this episode, Dr George McGavin gets up close and personal with Siswi, an orangutan who uses soap to improve her personal hygiene. He strips off to experience the mind-numbing cold of the Japanese Alps and heads 100 metres underground to a secluded monkey dormitory.

Then there are baboons with a thirst for flamingo flesh, macaques with criminal minds, fluorescent mandrills who wear war paint to do battle, and Ardry, a real-life gremlin who sees the unseeable with her extraterrestrial fingers.

SUN 01:05 Tails You Win: The Science of Chance (p00yh2rc)

Smart and witty, jam-packed with augmented-reality graphics and fascinating history, this film, presented by professor David Spiegelhalter, tries to pin down what chance is and how it works in the real world. For once this really is 'risky' television.

The film follows in the footsteps of The Joy of Stats, which won the prestigious Grierson Award for Best Science/Natural History programme of 2011. Now the same blend of wit and wisdom, animation, graphics and gleeful nerdery is applied to the joys of chance and the mysteries of probability, the vital branch of mathematics that gives us a handle on what might happen in the future. Professor Spiegelhalter is ideally suited to that task, being Winton professor for the public understanding of risk at Cambridge University, as well as being a recent Winter Wipeout contestant on BBC TV.

How can you maximise your chances of living till you're 100? Why do many of us experience so many spooky coincidences? Should I take an umbrella? These are just some of the everyday questions the film tackles as it moves between Cambridge, Las Vegas, San Francisco and... Reading.

Yet the film isn't shy of some rather loftier questions. After all, our lives are pulled about and pushed around by the mysterious workings of chance, fate, luck, call it what you will. But what actually is chance? Is it something fundamental to the fabric of the universe? Or rather, as the French 18th century scientist Pierre Laplace put it, 'merely a measure of our ignorance'.

Along the way Spiegelhalter is thrilled to discover One Million Random Digits, probably the most boring book in the world, but one full of hidden patterns and shapes. He introduces us to the cheery little unit called the micromort (a one-in-a-million chance of dying), taking the rational decision to go sky-diving because doing so only increases his risk of dying this year from 7000 to 7007 micromorts. And in one sequence he uses the latest infographics to demonstrate how life expectancy has increased in his lifetime and how it is affected by our lifestyle choices - drinking, obesity, smoking and exercise.

Did you know that by running regularly for half an hour a day you can expect to extend your life by half an hour a day? So all very well... if you like running.

Ultimately, Tails You Win: The Science of Chance tells the story of how we discovered how chance works, and even to work out the odds for the future; how we tried - but so often failed - to conquer it; and how we may finally be learning to love it, increasingly setting uncertainty itself to work to help crack some of science's more intractable problems.

Other contributors include former England cricketer Ed Smith, whose career was cut down in its prime through a freak, unlucky accident; Las Vegas gambling legend Mike Shackleford, the self-styled 'Wizard of Odds'; and chief economist of the Bank of England, Spencer Dale.

SUN 02:05 The Wonder of Animals (b04kzvxq)
Dolphins

Chris Packham explores the success of the most widespread of marine mammals, the dolphin. Contrary to their amiable reputation, they are in fact ruthless predators. They hunt using a combination of specialised anatomy and complex communication, requiring a big brain.

Chris explains the inner workings of dolphin echolocation, reveals how a pod uses body movements to communicate the location of food and explores the strategies used by orcas during a hunt.

SUN 02:35 A Timewatch Guide (b083dd1g)
Series 3

Russia: A Century of Suspicion

At the outbreak of war in 1939, wondering whether Russia would join the fight with the Allies, Sir Winston Churchill famously described this nation as 'a riddle wrapped in a mystery inside an enigma'. These words have almost come to define Britain's view of Russia ever since: an inscrutable power that always plays by its own rules.

Military historian Saul David draws on classic Timewatch documentaries and a wide range of BBC archive to examine how television has portrayed Russia through the years. From our trusted World War II ally to the red oppressor of the Cold War, from a potential free-market friend when Communism crumbled to a new 21st-century foe under Putin, Russia has swung from friend to foe and back again - either way, we find it incredibly hard to understand her.

This programme explores how arguably Britain's most complex international relationship has played out on television.

MONDAY 28 NOVEMBER 2016**MON 19:00 World News Today (b083wtxp)**

The latest national and international news, exploring the day's events from a global perspective.

MON 19:30 Railway Walks with Julia Bradbury (b00dwflf)
Discovering Snowdonia

Julia walks along the stunning Mawddach estuary in north Wales. The area between Dolgellau and the coastal resort of Barmouth is one of the least visited parts of Snowdonia, but in the 1860s it received a great rush of holidaymakers, taking advantage of the new railway that connected the valley to the cities of England.

MON 20:00 Monkey Planet (p01s0z7y)
Family Matters

The key to primate success is that, like us, most species live in close-knit family groups. How do you choose your friends, learn from those around you and know who to trust? We explore the complex world of primate social lifestyles.

In Peru, emperor tamarin males are coned into childcare, while vervet monkeys in South Africa have a sophisticated alarm system to warn for predators. Elsewhere, George has a very close encounter with some hunting chimpanzees.

But living in families is not always easy. In Gibraltar, barbary macaques steal babies to impress their boss. Hamadryas baboon males in Ethiopia rule with an iron fist, and in matriarchal ring-tailed lemur societies, the girls have to fight pitched battles with babies in tow.

MON 21:00 The Joy of Data (b07lk6tj)

A witty and mind-expanding exploration of data, with mathematician Dr Hannah Fry. This high-tech romp reveals what data is and how it is captured, stored, shared and made sense of. Fry tells the story of the engineers of the data age, people most of us have never heard of despite the fact they brought about a technological and philosophical revolution.

For Hannah, the joy of data is all about spotting patterns. Hannah sees data as the essential bridge between two universes - the tangible, messy world that we see and the clean, ordered world of maths, where everything can be captured beautifully with equations.

The film reveals the connection between Scrabble scores and online movie streaming, explains why a herd of dairy cows are wearing pedometers, and uncovers the network map of Wikipedia. What's the mystery link between marmalade and One Direction?

The film hails the contribution of Claude Shannon, the mathematician and electrical engineer who, in an attempt to solve the problem of noisy telephone lines, devised a way to digitise all information. Shannon singlehandedly launched the 'information age'. Meanwhile, Britain's National Physical Laboratory hosts a race between its young apprentices in order to demonstrate how and why data moves quickly around modern data networks. It's all thanks to the brilliant technique first invented there in the 1960s by Welshman Donald Davies - packet switching.

But what of the future? Should we be worried by the pace of change and what our own data could be used for? Ultimately, Fry concludes, data has empowered all of us. We must have machines at our side if we're to find patterns in the modern-day data deluge. But, Fry believes, regardless of AI and machine learning, it will always take us to find the meaning in them.

MON 22:00 Black Nurses: The Women Who Saved the NHS (b083dgtb)

Documentary which tells the story of the thousands of Caribbean and African women who answered the call 70 years ago to come to the UK to save the then ailing health service. It's a tale of a struggle to overcome racism, their fight for career progression and their battle for national recognition.

MON 23:00 The First World War (b01rp9x0)
Germany's Last Gamble

In March 1918, Germany launched a massive offensive on the Western Front - her bid to win the war before the Americans arrived. The master was General Erich Ludendorff - a genius, but unstable. Within days the British Fifth Army was in retreat, Paris was under shell-fire and some Allies feared defeat. But Germany's allies, Ottoman Turkey and Austria-Hungary, were starving and demoralised and the war-weary German Home Front was infected with dangerous socialist ideas. Then Ludendorff's great offensive ran out of steam, having stormed ahead without strategic aims or supplies. German soldiers

slowed, exhausted and hungry. And then the Americans started pouring in.

MON 23:50 Dan Cruickshank's Adventures in Architecture (b00bs1y8)
Power

Historian and writer Dan Cruickshank celebrates architecture as a creative force as he explores the world's greatest cities, buildings and monuments. Dan examines buildings as gigantic statements of power. The fantasies of dictators, kings, sultans, warriors and the ruling classes are all exposed as Dan explores the world's palaces of power in Romania, the Middle East, the American South, Turkey and Kazakhstan.

Dan tells the story of Ceausescu's Palace in Romania, a colossal palace built by the 20th century's last communist dictator. He then travels to the Middle East to see Marqab Castle in Syria, constructed by the Crusaders to vanquish Muslims.

In New Orleans Dan explores an imposing plantation house which is in stark contrast to the slave cabins that it sits next to, and explores the living legacy of slavery. He also tells the history of the Topkapi Harem in Istanbul, a place where women too were slaves - but where they could also give birth to the country's next emperor. And finally, he visits Astana in Kazakhstan, one of the newest capital cities of the 21st century.

MON 00:50 Turner's Thames (b01jv255)

In this documentary, the presenter and art critic Matthew Collings explores how Turner, the artist of light, makes light the vehicle of feeling in his work, and how he found inspiration for that feeling in the waters of the River Thames.

JMW Turner is the most famous of English landscape painters. Throughout a lifetime of travel, he returned time and again to paint and draw scenes of the Thames, the lifeblood of London. This documentary reveals the Thames in all its diverse glory, from its beauty in west London, to its heartland in the City of London and its former docks, out to the vast emptiness and drama of the Thames estuary near Margate.

Turner was among the first to pioneer painting directly from nature, turning a boat into a floating studio from which he sketched the Thames. The river and his unique relationship with it had a powerful impact upon his use of materials, as he sought to find an equivalent in paint for the visual surprise and delight he found in the reality of its waters.

By pursuing this ever-changing tale of light, Turner also documented and reflected upon key moments in British history in the early 19th century; the Napoleonic wars, social unrest and the onset of the industrial revolution. His paintings of the river Thames communicate the fears and exultations of the time.

Turner's greatness as a painter is often attributed to his modern use of colour. Many of his paintings are loved by the British public and regularly celebrated as the nation's greatest art. This film reveals for the first time on television a key inspiration for that modernity and celebrity; a stretch of water of immense importance to the nation in the early 19th century but which today is often taken for granted - the River Thames.

MON 01:50 The Polio Story: The Vaccine That Changed the World (b05n27mt)

It was 1952, and polio gripped the world in fear. There was no known cause, no cure and no help in sight for parents desperate to protect their children. Across the ocean, eager to beat the potentially fatal condition, polio-afflicted President Roosevelt inspired the American public to send in their dimes to fund research.

In just a few years Joseph Salk, an ambitious 33-year-old scientist working from his basement lab in Pittsburgh, would bring infantile paralysis to its knees and change the course of medical history. Bill Gates is interviewed along with a number of world-renowned experts and survivors to tell the extraordinary story of how Dr Salk and the legendary 'march of dimes' came together to help conquer polio.

MON 02:35 The Joy of Data (b07lk6tj)
[Repeat of broadcast at 21:00 today]**TUESDAY 29 NOVEMBER 2016****TUE 19:00 World News Today (b083wtxy)**

The latest national and international news, exploring the day's events from a global perspective.

TUE 19:30 Railway Walks with Julia Bradbury (b00dzz60)
The Birth of Steam

Tin and copper once made the area around Redruth the richest patch of land in the country. They inspired great engineering feats and pioneering tramways, the forebears of the rail empire. Julia Bradbury has her work cut out as she crosses an entire county, winding past Cornwall's crumbling engine houses and following a railway that has not operated for 140 years.

TUE 20:00 Natural World (b011b4vn)
2012-2013

Tiger Island

Jungle tigers are turning into man-eaters in the exotic island of Sumatra. Now a maverick millionaire is catching the killers and releasing them on his land. Is this madness, or could it save them from extinction?

TUE 21:00 Storyville (b084fs2p)
The Cult that Stole Children - Inside The Family

An incendiary, heartbreaking investigation into one of Australia's most notorious cults, and the scars its survivors still bear today.

Anne Hamilton-Byrne was beautiful, charismatic, delusional and damaged. She was also incredibly dangerous. Convinced she was a living god, Hamilton-Byrne headed an apocalyptic sect dubbed The Family, which was prominent in Melbourne through the 60s and 70s. With her husband Bill, she acquired numerous children - some through adoption scams, some born to cult members - and raised them as her own. Isolated from the outside world, the children were dressed in matching outfits, had identically dyed blonde hair, and were allegedly beaten, starved and injected with LSD. Taught that Hamilton-Byrne was both their mother and the messiah, the children were eventually rescued during a police raid in the mid 80s, but their trauma had only just begun.

TUE 22:00 The Secret History of Our Streets (b01kn6jn)
Series 1

Reverdy Road

In 1886 Charles Booth embarked on an ambitious plan to visit every one of London's streets to record the social conditions of residents. His project took him 17 years.

Once he had finished he had constructed a groundbreaking series of maps which recorded the social class and standing of inhabitants. These maps transformed the way Victorians felt about their capital city.

This series takes six archetypal London streets as they are now, discovering how they have fared since Booth's day.

Booth colour-coded each street, from yellow for the 'servant-keeping classes', down to black for the 'vicious and semi-criminal'. With the aid of maps the series explores why certain streets have been transformed from desperate slums to become some of the most desirable and valuable property in the UK, whilst others have barely changed.

This landmark series features residents past and present, exploring how what happened on the street in the last 125 years continues to shape the lives of those who live there now.

The fifth episode features Reverdy Road, Bermondsey, which has endured as an enclave of working-class respectability. When Booth visited in 1900, he was impressed by the houses and gardens, and by the broad and clean streets.

Older residents recall life on the street during the war, when three houses were bombed, and trips to the hop fields of Kent. They also remember the work of a pioneer of public health, Dr Alfred Salter, who lived in the house on the corner of the street, a house that has been occupied by a doctor since 1880.

TUE 23:00 Treasures of Ancient Greece (b05qgrr)
The Classical Revolution

Alastair Sooke unpicks the reasons behind the dazzling revolution that gave birth to classical Greek art, asking how the Greeks got so good so quickly. He travels to the beautiful Valley of the Temples in Agrigento, and to the island of Mozia to see the astonishing charioteer found there in 1979, and marvels at the athletic bodies of the warriors dragged from the seabed - the Riace Bronzes.

It was a creative explosion that covered architecture, sculpting in marble, casting in bronze, even painting on vases. Perhaps the most powerful factor was also its greatest legacy - a fascination with the naked human body.

TUE 00:00 Britain's Lost Waterlands: Escape to Swallows

and Amazons Country (b07k18jf)
[Repeat of broadcast at 20:00 on Saturday]

TUE 01:00 Nigel Slater's Great British Biscuit (b03lly33)
Nigel Slater takes us on a nostalgic, funny and heart-warming journey back in time - through the biscuit tins of mum and dad, the doilies and saucers of aunts and grannies, the lunch boxes of friends and siblings. Nigel charts the origins of the humble biscuit, from its vital contribution to Britain's nautical dominance of the globe, through to the biscuit tin becoming that most ubiquitous of household items. He explores the history of our most famous brands, uncovering the Georgian and Quaker origins of the biscuits we love and eat today, meeting eccentric biscuit anoraks who have dedicated their lives to a love of these simple baked treats and meeting scientists who squash, dunk and ignite biscuits for research purposes.

Nigel recalls the biscuits he found in his lunch box, the ones he cherished and the ones that would shape his formative years.

He asks why it is, that of all the treats we indulge in on a regular basis, the biscuit has become such a dependable culinary companion. What makes Britain a nation of ardent biscuit eaters like no other in the world, with a £2.3 billion industry to match?

TUE 02:00 Storyville (b084fs2p)
[Repeat of broadcast at 21:00 today]

TUE 03:00 Storyville (b0845j51)
[Repeat of broadcast at 22:30 on Sunday]

WEDNESDAY 30 NOVEMBER 2016

WED 19:00 World News Today (b083wtzx)
The latest national and international news, exploring the day's events from a global perspective.

WED 19:30 Railway Walks with Julia Bradbury (b00f3pg9)
The Whisky Train

Julia Bradbury's first walking foray into Scotland has a very distinct flavour to it - whisky! The Speyside Way is one of Scotland's great walking routes, and between the villages of Craigellachie and Ballindaloch it follows the route of the railway that once served a remote area and a world-famous drinks industry.

WED 20:00 Ian Hislop's Scouting for Boys (b007hfx3)
Robert Baden-Powell's handbook Scouting for Boys, written in 1908, may be largely forgotten today, but it is one of the most influential and best-selling books of all time. In the 20th century, only the Bible, the Koran and the Thoughts of Chairman Mao sold more. But they had fewer jokes, no pictures and were useless at important stuff like tying knots.

In this entertaining and affectionate film, Ian Hislop uncovers the story behind the book which kick-started the Scout Movement - a work which is very eccentric, very Edwardian and very British.

Ian discovers that the book is actually very radical and addresses all sorts of issues that we think of as modern, such as citizenship, disaffected youth and social responsibility. He explores the maverick brilliance of Baden-Powell, a national celebrity after his heroism in the Boer War, and considers the book's candid focus on health and wellbeing - from the importance of what Baden-Powell called a 'daily rear' to his infamous warning on the dangers of masturbation.

Contributors include his grandson Lord Baden-Powell, minister for culture and former cub scout David Lammy, biographer Tim Jeal and Elleke Boehmer, editor of the re-issue of the original Scouting for Boys.

WED 21:00 How Quizzing Got Cool: TV's Brains of Britain (b084fs6s)

We all love a good quiz. So here's a question - when did ordinary contestants turn into the pro-quizzers of today? Giving the answers are Victoria Coren Mitchell, Judith Keppel, Chris Tarrant, Mark Labbett, Nicholas Parsons and many more. Narrated by Ben Miller.

WED 22:00 Starter for 10 (b03bvwft)
Comedy about Brian, a 1980s working-class boy stumbling romantically and academically through his first year at Bristol University. He tries to achieve his lifelong ambition to appear on TV quiz show University Challenge and falls in love with his teammate.

WED 23:30 Ian Hislop's Scouting for Boys (b007hfx3)
[Repeat of broadcast at 20:00 today]

WED 00:30 The Secret History of Our Streets (b01kn6jn)
[Repeat of broadcast at 22:00 on Tuesday]

WED 01:30 Great Artists in Their Own Words (b01skwfg)
But Is it Art? (1966-1993)

Last of a three-part series which unlocks the BBC archives to tell the story of modern art in the words of the artists themselves looks at how radical late 20th-century artists took on centuries of art history and won - from the notorious 'bricks' of Carl Andre to the 'living sculptures' Gilbert and George, from the shockingly explicit photography of Robert Mapplethorpe to the powerful nudes of Lucian Freud and sensational pickled sharks of Damien Hirst.

WED 02:30 How Quizzing Got Cool: TV's Brains of Britain (b084fs6s)
[Repeat of broadcast at 21:00 today]

THURSDAY 01 DECEMBER 2016

THU 19:00 World News Today (b083wv0q)
The latest national and international news, exploring the day's events from a global perspective.

THU 19:30 Top of the Pops (b0844w9t)
John Peel presents the pop chart show, first broadcast on 23 September 1982. Includes appearances from David Christie, Culture Club, Fat Larry's Band, Depeche Mode, Musical Youth, Survivor and Evelyn King. Also includes a dance performance from Zoo.

THU 20:00 Dangerous Earth (b08445rk)
Aurora

Dr Helen Czerski looks at the latest scientific insight into the aurora - dancing lights in the night sky that have fascinated cultures throughout our history. From the networks of cameras now capturing its vast scale, to novel experiments that probe the threat it poses to modern technology, Helen reveals the dramatic transformation in our understanding of the aurora, and the many mysteries that remain to be solved.

THU 20:30 Hive Minds (b08445rm)
Series 2

Episode 13

Prime play Cruciverbalists for the Hive Minds series trophy.

THU 21:00 The Sikhs of Smethwick (b0845kls)
Midlands filmmaker Billy Dosaanjh celebrates 50 years of the Sikhs in his hometown of Smethwick, from their arrival in the late 1950s and early 60s to the present day. Using rare archive and the frank personal testimony of different generations of Smethwick's Sikhs, he explores the experiences of the changing traditions and the challenges to centuries old traditions - especially in love and marriage - that life in modern Britain brings.

Using rare and unseen archive Billy goes on a moving journey through space and time - from farm life in northern India to the searing heat of work in the steel factories of Britain's Black Country; from extreme rural poverty to the have-it-all consumer culture of today; from strict traditions to a world of tolerance and the modern permissive society.

Billy tells of the hostility and tough working conditions the first Sikhs experienced when they arrived in Smethwick. He shows the old customs that they tried to keep from their impoverished villages in the Punjab. Examining the challenges of the modern world and how their traditions have evolved, especially when it comes to love and marriage, Billy gives a personal insight to the world of his community, and the way its culture has adapted across the generations to the challenges of life in modern Britain.

THU 22:00 Colour: The Spectrum of Science (p02vnx6x)
Colours of Earth

We live in a world ablaze with colour. Rainbows and rainforests, oceans and humanity, Earth is the most colourful place we know of. But the colours we see are far more complex and fascinating than they appear. In this series, Dr Helen Czerski uncovers what colour is, how it works, and how it has written the story of our planet - from the colours that

transformed a dull ball of rock into a vivid jewel to the colours that life has used to survive and thrive. But the story doesn't end there - there are also the colours that we can't see, the ones that lie beyond the rainbow. Each one has a fascinating story to tell.

In the first episode, Helen seeks out the colours that turned planet Earth multicoloured. To investigate the essence of sunlight Helen travels to California to visit the largest solar telescope in the world. She discovers how the most vivid blue is formed from sulphur atoms deep within the Earth's crust and why the presence of red ochre is a key sign of life. In gold, she discovers why this most precious of metals shouldn't even exist on the surface of the planet and in white, Helen travels to one of the hottest places on Earth to explore the role salt and water played in shaping planet Earth.

THU 23:00 Blink: A Horizon Guide to the Senses (b01kptcr)

Touch, sight, smell, hearing and taste - our senses link us to the outside world. Dr Kevin Fong looks back through 40 years of Horizon archives to find out what science has taught us about our tools of perception - why babies use touch more than any other sense, why our eyes are so easily tricked and how pioneering technology is edging closer to the dream of replacing our human senses if they fail.

THU 00:00 Horizon (b00vv0w8)

[Repeat of broadcast at 22:30 on Saturday]

THU 01:00 Top of the Pops (b0844w9t)

[Repeat of broadcast at 19:30 today]

THU 01:40 The Sikhs of Smethwick (b0845kls)

[Repeat of broadcast at 21:00 today]

THU 02:40 Virtuoso Violinists at the BBC (b072x1qh)

[Repeat of broadcast at 19:00 on Sunday]

FRIDAY 02 DECEMBER 2016

FRI 19:00 World News Today (b083wv1q)

The latest national and international news, exploring the day's events from a global perspective.

FRI 19:30 Top of the Pops (b0844wjb)

John Peel presents the chart show, first broadcast on 14 October 1982. Includes appearances from Mari Wilson, Tears for Fears, Pinkies, Barry Manilow, Melba Moore, Ultravox, The Beatles and Musical Youth. Also includes a dance performance from Zoo.

FRI 20:00 The Good Old Days (b08446bp)

Leonard Sachs presents an edition of the old time music hall programme, first broadcast on 27 January 1977. With Mike Reid, The Beverley Sisters, Valerie Monese, Graham Clark and members of the Players' Theatre, London.

FRI 21:00 The Joy of the Single (b01nzchs)

Do you remember buying your first single? Where you bought it? What it was? The thrill of playing it for the first time? What it sounded like? How it maybe changed your life? Lots of us do. Lots of us still have that single somewhere in a dusty box in the attic, along with other treasured memorabilia of an adolescence lost in music and romance. The attic of our youth.

The Joy of the Single is a documentary packed with startling memories, vivid images and penetrating insights into the power of pop and rock's first and most abiding artefact - the seven-inch, vinyl 45-rpm record, a small, perfectly formed object that seems to miraculously contain the hopes, fears, sounds and experiences of our different generations - all within the spiralling groove etched on its shiny black surface, labelled and gift-wrapped by an industry also in its thrall.

In the confident hands of a star-studded cast, the film spins a tale of obsession, addiction, dedication and desire. The viewer is invited on a journey of celebration from the 1950s rock 'n' roll generation to the download kids of today, taking in classic singles from all manner of artists in each decade - from the smell of vinyl to the delights of the record label, from the importance of the record shop to the bittersweet brevity of the song itself, from stacking singles on a Dansette spindle to dropping the needle and thrilling to the intro.

Featuring contributions from Noddy Holder, Jack White, Richard Hawley, Suzi Quatro, Holly Johnson, Jimmy Webb, Pete Waterman, Norah Jones, Mike Batt, Graham Gouldman, Miranda Sawyer, Norman Cook, Trevor Horn, Neil Sedaka, Paul Morley, Rob Davies, Lavinia Greenlaw, Brian Wilson and

Mike Love.

FRI 22:00 Promises & Lies: The Story of UB40 (b084j56n)

One of the most commercially successful acts of all time, UB40 enjoyed decades of huge success, selling over 70 million records with global hits including Red Red Wine, Can't Help Falling in Love and I Got You Babe.

But stardom and fame came at a price, and the band found themselves victims of their own success - bankrupt and penniless.

Ali Campbell, Robin Campbell, Astro, Brian Travers, Mickey Virtue and Jimmy Brown recount their phenomenal rise to fame and speak with candour about their ongoing dispute that has split a family and a band as they continue to tour as two separate groups - both using the name UB40.

FRI 23:00 Rock Family Trees (b0074smh)

Series 1

The Birmingham Beat

Series exploring the dramas that lie behind some of the best-known bands. Birmingham has produced some of the most successful British pop groups of the last three decades, including the Move, ELO and Wizzard. This programme follows the careers of musicians such as Roy Wood, Jeff Lynne, Denny Laine and Bev Bevan through their various bands and successes.

Based on the book by music journalist Pete Frame.

FRI 23:50 Top of the Pops (b0844wjb)

[Repeat of broadcast at 19:30 today]

FRI 00:25 The Joy of the Single (b01nzchs)

[Repeat of broadcast at 21:00 today]

FRI 01:25 Promises & Lies: The Story of UB40 (b084j56n)

[Repeat of broadcast at 22:00 today]

FRI 02:25 Britpop at the BBC (b0409s91)

In the mid-90s, Britpop stamped its presence onto the British music scene and made boys wearing eyeliner cool again. What better reason to raid the BBC archives for a rich treasure trove of the joy and the time that was Britpop?

Featuring the girls (Elastica, Sleeper) and the boys (Suede, Menswear) and many of the other bright young things that contributed to five years of Cool Britannia, Blur v Oasis and Camden being the centre of the universe. Britpop at the BBC reminds us all why we were all so proud to be British again in the 1990s.