

**SATURDAY 15 DECEMBER 2012**

**SAT 19:00 Around the World in 60 Minutes (b00ymjkt)**

A unique journey around the weird and wonderful planet that we call home.

When Yuri Gagarin was blasted into space he became the first human to get a proper look at where we live. 'The Earth is blue,' he exclaimed, 'how amazing!'. Suddenly our perspective on the world had changed forever. We thought we were going to explore the universe, yet the most extraordinary thing we discovered was our own home planet, the Earth.

So what would you see during just one orbit of the Earth? Starting 200 miles above the planet, this film whisks you around the planet to show what changes in the time it takes to circumnavigate the Earth just once. We hear from British-born astronaut Piers Sellers on what it's like to live and work in space, and also to gaze down and see how we are altering and reshaping our world.

We marvel at the incredible forces of nature that brings hundred-mile wide storms and reshapes continents, and also discover how we humans are draining seas and building cities in the middle of the desert. We also visit the wettest place on Earth, as well as the most volcanic.

Narrated by David Morrissey, this inspirational trip around the planet will make you view our home as you've never seen it before.

**SAT 20:00 David Attenborough's First Life (b00w14gy)**  
Conquest

In fifty years of broadcasting, Sir David Attenborough has travelled the globe to document the living world in all its wonder. Now, in a landmark series, he completes his journey by going back in time to the very roots of the tree of life, in search of the very first animals.

Attenborough's journey continues in Canada's Rocky Mountains, where fossils document an explosion in animal diversity never seen before or since. Travelling from there to North Africa, the rainforests of Australia and the east coast of Scotland, Attenborough discovers how animals evolved to conquer not only the oceans but also the land and air.

These remote and fascinating creatures are brought to life as never before with the help of cutting-edge scientific technology and photorealistic visual effects. From the first large predators to the first legs on land, these were creatures that evolved the traits and tools that allow all animals, including ourselves, to survive to this day.

**SAT 21:00 The Killing (b01phjfb)**

Series 3

Episode 9

Sarah Lund is held back in her attempts to make headway with the investigation, but at least the perpetrator finally has a face. Will he lead police and the Zeuthens to Emilie? Prime Minister Kamper is trying to clean up his circle as he attempts to find out what happened to his son. Suspicions arise about a trusted Zealand figure as Robert Zeuthen considers drastic action.

In Danish with English subtitles.

**SAT 22:00 The Killing (b01phjfb)**

Series 3

Episode 10

It's election day and the Prime Minister has everything to gain, as long as Emilie's fate remains uncertain. Kamper is still haunted by personal demons, and issues of loyalty from within his own ranks rear their ugly heads once again. Meanwhile, as Lund and Borch start to look ahead, police are led to an undisclosed location in a last ditch attempt to find Emilie before it's too late. They are followed by a now dangerously tense Robert Zeuthen. Will the operation succeed in bringing the girl to safety?

In Danish with English subtitles.

**SAT 23:00 The Making of Elton John: Madman Across the Water (b00vs4yv)**

Documentary exploring Elton John's childhood, apprenticeship in the British music business, sudden stardom in the US at the dawn of the 70s and his musical heyday. Plus the backstory to the album reuniting him with Leon Russell, his American mentor. Features extensive exclusive interviews with Elton, plus colleagues and collaborators including Bernie Taupin, Leon Russell and others.

**SAT 00:00 ...Sings Bond (b01p97hr)**

The BBC archive uncovers performances of some of the finest Bond theme tunes from its top secret vaults and pays a TV tribute to a classic British icon.

Prepare to be shaken and stirred by Tina Turner and her GoldenEye, Dame Shirley Bassey with her Diamonds, Tom Jones rampaging with Thunderball, Matt Monro romancing in Russia, The Fun Lovin' Criminals taking all the time in the world, Adele's sky-high contribution to 007 and much more from Sheena Easton, Garbage, A-ha and others, from all manner of BBC shows.

Sit back and marvel at our selection of the greatest Bond songs in history - a tuxedo and a dry vodka martini is optional.

**SAT 01:00 Timeshift (b01p96ly)**

Series 12

When Wrestling was Golden: Grapples, Grunts and Grannies

Timeshift turns back the clock to a time when villains wore silver capes, grannies swooned at the sight of bulky men in latex and the most masculine man in the country was called Shirley. In its heyday, British professional wrestling attracted huge TV audiences and made household names of generations of wrestlers from Mick McManus and Jackie 'Mr TV' Pallo to Giant Haystacks and Big Daddy. With contributions from inside the world of wrestling and surprising fans such as artist Peter Blake, this is an affectionate and lively portrait of a lost era of simpler pleasures, both in and out of the ring.

**SAT 02:00 Top of the Pops (b01pcpl9)**

24/11/77

David 'Kid' Jensen looks at the weekly pop chart from 1977 and introduces the Carvels, Bonnie Tyler, Hot Chocolate, Darts, Leo Sayer, Santa Esmerelda, Abba, Wings, the Bee Gees and a Legs & Co dance sequence to Jonathan Richman.

**SAT 02:35 The Making of Elton John: Madman Across the Water (b00vs4yv)**

[Repeat of broadcast at 23:00 today]

**SUNDAY 16 DECEMBER 2012**

**SUN 19:00 The Roasts of Christmas Past (b018157j)**

Roasts of Christmas Past explores television's changing relationship with the British Christmas dinner, looking at how TV cooks like Fanny Craddock, Gary Rhodes, Jamie Oliver and Nigella Lawson have each put their stamp on our annual feast.

How hard is it to give the same old ingredients a new twist every year? Why do so many of us turn to Delia at this special time of year? And why does it have to be turkey?

The documentary looks at the pre-TV history of the meal, the pioneering work of post-war cook Marguerite Patten and the subsequent changes in the style of these shows, which began as lessons and have ended up as entertainment. Do we still follow the recipes - or just envy the lifestyle?

It also examines how TV dramas and comedies have portrayed Christmas dinner, from Coronation Street and Till Death Us Do Part in the 60s through to EastEnders and the Royle Family today. Why is it so often seen as a source of conflict?

Contributors include chefs Rick Stein, Ainsley Harriott and Antony Worrall Thompson, and food experts Prue Leith, Jay Rayner, Stefan Gates and Matthew Fort.

**SUN 20:00 A Very English Winter: The Unthanks (b01pdsvd)**

Rachel and Becky Unthank continue their journey around England's hidden customs and dance traditions and into the dark heart of its winter pastimes. The follow-up to Still Folk Dancing After All These Years, which explored English folk dances from spring to harvest, this film explores English folk customs around the country though the other six months of the year.

Two hundred years of political intrigue and clashes with police authorities in Lewes on Guy Fawkes Night have created an awe-inspiring procession of burning popes and other effigies of the enemies of the bonfire, not to mention a heavy police presence to this day. Throwing the Yorkshire carols of Sheffield out of the church repertoire has only served to enhance the heart-stopping show of unrestrained joy found in the powerful singing at the Royal Hotel pub in Dungworth.

The longsword dancers of the North East and molly dancers of East Anglia, who have gone collecting funds each year, are a reminder that no higher power puts food on the plate. Just as these customs rely on the communities themselves to mark each

point with song, remembrance and a gathering together, the very need to survive lies in the hands of your neighbour.

The Unthanks discover these stories through singing, dancing, meeting people who have grown up with these traditions and trying not to get set on fire.

**SUN 21:00 Chas & Dave: Last Orders (b01nkdsv)**

Documentary which highlights cockney duo Chas & Dave's rich, unsung pedigree in the music world and a career spanning 50 years, almost the entire history of UK pop. They played with everyone from Jerry Lee Lewis to Gene Vincent, toured with The Beatles, opened for Led Zeppelin at Knebworth - and yet are known mainly just for their cheery singalongs and novelty records about snooker and Spurs.

The film also looks at the pair's place among the great musical commentators on London life - and in particular the influence of music hall on their songs and lyrics.

The film crew followed Chas & Dave on their final tour, having called it a day after the death of Dave's wife, and blends live concert footage with archive backstory, including some astonishing early performances and duets with the likes of Eric Clapton. Among the experts and zealous fans talking about their love of the duo are Pete Doherty, Jezus Holland and Phill Jupitus. Narrated by Arthur Smith.

**SUN 22:00 Storyville (b01kxx71)**

The Other Irish Travellers

Storyville: documentary which takes a personal look at the history of Ireland's vanished Anglo-Irish classes through the quirky family of filmmaker Fiona Murphy. The director follows her father and his four siblings back to the estate in County Mayo where they grew up in the newly-independent Ireland of the 1930s, to trace lives rich in contradiction.

While the siblings wrestled with their Anglo-Irish identity, their father carved out a successful career as a diplomat at the height of the British Empire. Tracking the family's fortunes from Cromwell's times, through first-hand accounts of the Civil War and mass exodus of the Anglo-Irish under Eamon de Valera, the film explores how this individualistic family tried to hold on, despite the odds.

**SUN 23:00 The Hunter (b01c2bjq)**

Seeking vengeance, a man randomly kills two police officers. He escapes to the forest where he is pursued by two other officers.

In Farsi with English subtitles.

**SUN 00:25 Chas & Dave: Last Orders (b01nkdsv)**

[Repeat of broadcast at 21:00 today]

**SUN 01:25 James Bond 50th Anniversary Gala Concert (b01p97hp)**

A night dedicated to the music of 007. Conductor Carl Davis and the Philharmonia Orchestra create a concert bringing together the iconic theme tunes from the James Bond films, including Goldfinger, Diamonds are Forever, From Russia with Love, GoldenEye and many more. Honor Blackman, who played the legendary Pussy Galore, leads us on the journey through the world of Bond across the 50 years and 23 films. Featuring Strictly Come Dancing vocalist Lance Ellington and Mary Carewe as the soloists in a concert performed at the Royal Festival Hall in London.

**SUN 02:55 Omnibus (b007brkx)**

John Barry: Licence to Thrill

John Barry is the most successful film score composer of the 20th century. From his work on the Bond movies, Born Free, Out of Africa, Dances With Wolves and many more he has produced cinema's most memorable music, winning five Oscars in the process.

But behind all the Hollywood glitz and glamour, Yorkshire born Barry is a private and self-effacing man who talks emotionally about his early childhood, his relationship with his father and the impact of World War II.

This is the first film ever to profile Barry and joining him are Michael Caine, Kevin Costner, and Adam Faith.

**MONDAY 17 DECEMBER 2012**

**MON 19:00 10 Things You Didn't Know About... (b008s99l)**  
Earthquakes

Iain Stewart looks at some of the world's most dramatic earthquakes and reveals the stories and science behind them. In seconds, these powerful forces of nature which cannot be predicted or prevented can shake a town to destruction and shift the landscape forever. We discover why quakes can last 60 times longer on the moon than on Earth, how one particular earthquake fault line can produce hallucinations, and how 1960s Cold War spying gave scientists a crucial clue to understanding them.

**MON 20:00 Britain by Bike (b00t6yhb)**

The Welsh Borders

Clare Balding sets out on a two-wheel odyssey to rediscover Britain from the saddle of a touring cycle. In a six-part series, she follows in the wheeltracks of compulsive cyclist and author Harold Briercliffe whose evocative guidebooks of the late 1940s lovingly describe bypassed Britain - a world of unspoiled villages, cycle touring clubs and sunny B roads.

Carrying a set of Harold's Cycling Touring Guides for company and riding his very own Dawes Super Galaxy bicycle, Clare goes in search of the world he described. Is it lost for ever? Or still there, waiting to be found?

Clare's journey into Wales is rich in literary connections to both Bruce Chatwin and AE Housman. She reveals how a cycle factory went to war and finds out about the Bride's Tree - a bizarre village ceremony with a dark secret.

**MON 20:30 Only Connect (b01pdsy4)**

Series 6

Scribes vs Draughtsmen

In the series final and the 100th episode, three writers square up to a trio of beer lovers for the right to be named Series 6 champions. They must draw together the connections between things which, at first glance, seem utterly random. So join Victoria Coren if you want to know what connects Marty Feldman's last film, captain of Queen Anne's Revenge, Holy Roman Emperor Frederick and wife-murdering Perrault character.

**MON 21:00 The Golden Age of Steam Railways (b01pdsy6)**

Branching Out

For more than 100 years steam trains ran Britain, but when steam started to disappear in the 1950s bands of volunteers got together to save some of the tracks and the steam engines that ran on them. Some of these enthusiasts filmed their exploits and the home movies they shot tell the story of how they did it, and how they helped people to reconnect to a world of steam most thought had been lost forever.

**MON 22:00 Timeshift (b01n8h19)**

Series 12

Magnificent Machines: The Golden Age of the British Sports Car

Timeshift sets its rear-view mirror to look back at the golden age of the British sports car. It's the story of how - in the grey austerity of the postwar years - iconic marques like Jaguar, Austin-Healey, MG and Triumph sparked a manufacturing frenzy that helped to democratise speed and glamour.

From the MG Midget, much loved by American GIs, through to the more affordable Austin Healey 'frog-eye' Sprite and the E-Type Jaguar, seen by many as the ultimate sports car, this is a tale of how, for a brief time, Britain was home to two-seater heaven.

**MON 23:00 The Killing (b01phjfb)**

[Repeat of broadcast at 21:00 on Saturday]

**MON 00:00 Britain by Bike (b00t6yhb)**

[Repeat of broadcast at 20:00 today]

**MON 00:30 Only Connect (b01pdsy4)**

[Repeat of broadcast at 20:30 today]

**MON 01:00 10 Things You Didn't Know About... (b008s991)**

[Repeat of broadcast at 19:00 today]

**MON 02:00 Punk Britannia (p00s81jz)**

Pre-Punk 1972-1976

Narrated by Peter Capaldi, this opener of a three-part documentary series in BBC FOUR's celebrated 'Britannia'

strand is scheduled to chime with the 35th anniversary of the Queen's Silver Jubilee and the arrival of punk as national and then international music culture. The film explores the road to punk in Britain, which begins in the early 70s with a young generation already conscious that they have 'missed the 60s party' and are stuck in a Britain heading for economic woes and dwindling opportunities. Meanwhile the music of the day - prog and super rock - seems to ask not for their interest and involvement, but only their awe and their money.

But before the punk generation finally arises to have its say during 1976 come a group of pub rockers, a generation of bands sandwiched between 60s hippies and mid-70s punks who will help pave the way towards the short, sharp shock of punk, only to be elbowed aside by the emergence of the Sex Pistols, the Clash et al.

An unlikely cast of characters set the scene for punk in early 70s Britain. Reacting against overblown super rock of the day and the glam their younger sisters like on Top of the Pops, pub rock set the template for punk. Small venues, fast retro rock 'n' roll and bags of attitude typified bands like Dr Feelgood, Ducks Deluxe, Kilburn and the High Roads and Eddie and the Hotrods. These bands engendered a small London scene which is sometimes forgotten and helped define the Pistols, the Clash and the Damned, both positively and negatively.

Featuring copious unseen archive footage and interviews with John Lydon, Paul Weller, Mick Jones, Wilko Johnson, Nick Lowe, Adam Ant, Brian James and many more.

**MON 03:00 The Golden Age of Steam Railways (b01pdsy6)**

[Repeat of broadcast at 21:00 today]

**TUESDAY 18 DECEMBER 2012**

**TUE 19:00 10 Things You Didn't Know About... (b008vrwk)**  
Avalanches

Iain Stewart travels across mountain ranges and glaciers to reveal ten remarkable stories about avalanches.

Over a million avalanches happen throughout the world each year, and yet we know more about the surface of the moon than we do about the chaotic turbulence inside an avalanche. Scientists have had to put themselves right inside a raging avalanche to find out more.

Stewart shows how the deadliest avalanche in history killed 18,000 people in three minutes; how Hannibal's army was devastated by avalanches as he crossed the Alps to fight Rome; why an avalanche was key to one of the greatest aviation mysteries of all time; and how global warming may increase the rate of ice avalanches in the future.

**TUE 20:00 Jet! When Britain Ruled the Skies (b01m81f5)**

Military Marvels

In the heady postwar years of the 1950s and 60s, British flying was at its zenith and its aircraft industry flourished in a dazzling display of ingenuity and design brilliance. Having invented the jet engine, Britain was now set to lead the world into the jet age with a new generation of fighters and bombers. The daring test pilots who flew them were as well known as the football stars of today, while their futuristic-looking aircraft, including the Meteor, Canberra, Valiant, Vulcan and the English Electric Lightning, were the military marvels of the age.

**TUE 21:00 The Dark Ages: An Age of Light (b01pdt02)**

The Men of the North

The Dark Ages have been misunderstood. History has identified the period following the fall of the Roman Empire with a descent into barbarism - a terrible time when civilisation stopped.

Waldemar Januszczak disagrees. In this four-part series he argues that the Dark Ages were a time of great artistic achievement, with new ideas and religions provoking new artistic adventures. He embarks on a fascinating trip across Europe, Africa and Asia, visits the world's most famous collections and discovers hidden artistic gems, all to prove that the Dark Ages were actually an 'Age of Light'.

In the final episode, Waldemar looks towards the north of Europe. The Carolingians saw themselves as successors to Rome, reflected in their art. Elsewhere, the Vikings were constructing long ships with intricate decoration and marking their territory with powerful rune stones. And on the British Isles, the Irish and Anglo-Saxons were creating unique works of manuscript illumination and remarkable jewellery.

**TUE 22:00 Rome: A History of the Eternal City (b01p96g4)**

Divine Gamble

Simon Sebag Montefiore charts the rocky course of Rome's rise to become the capital of western Christendom and its impact on the lives of its citizens, elites and high priests.

Rome casts aside its pantheon of pagan gods and a radical new religion takes hold. Christianity was just a persecuted sect until Emperor Constantine took a huge leap of faith, promoting it as the religion of Empire. But would this divine gamble pay off?

**TUE 23:00 The Killing (b01phjfb)**

[Repeat of broadcast at 22:00 on Saturday]

**TUE 00:00 Jet! When Britain Ruled the Skies (b01m81f5)**

[Repeat of broadcast at 20:00 today]

**TUE 01:00 10 Things You Didn't Know About... (b008vrwk)**

[Repeat of broadcast at 19:00 today]

**TUE 02:00 Punk Britannia (b01jmwjd)**

Punk 1976-1978

Daydreaming England was about to be rudely awoken as punk emerged from the London underground scene. A nation dropped its dinner in its lap when the Sex Pistols swore on primetime television. Punk had finally found its enemy - the establishment. In Manchester, the Buzzcocks' self-released Spiral Scratch was a clarion call for a do-it-yourself generation, while the Clash's White Riot tour took punk's message across Britain. Moral outrage followed the Pistols around the country, effectively outlawing punk - but there was one refuge for the music. Nestled in the wasteland of 70s Covent Garden, the Roxy was punk's cathedral. Punk interlopers the Jam raised the bar for lyricism, challenging punk's London elite.

Punk also began to extend its three-chord vocabulary through an alliance with reggae, memorably captured by the Clash on White Man in Hammersmith Palais. With their second single, God Save the Queen, the Pistols scored a direct hit at the establishment in summer '77, but a disastrous PR stunt on a Thames barge would mark a turning point. The darker underbelly of the summer of '77 would see race riots in Lewisham. This street turbulence was the backdrop for a rawer, working class sound. If the Pistols and the Clash had been the theory, a second wave led by Sham 69 was the reality.

By '78 punk was becoming a costume - the very pop orthodoxy it had originally sought to destroy. For many punk ended when the Pistols split, beset by internal problems, following an abortive tour of the USA in January '78. Those practitioners who would go on to enjoy sustained success sought to modify their sound to survive, such as Siouxsie Sioux. Punk had shown what it was against, now it was time to show what it was for in the post-punk era.

With John Lydon, Mick Jones, Siouxsie Sioux and Paul Weller.

**TUE 03:00 The Dark Ages: An Age of Light (b01pdt02)**

[Repeat of broadcast at 21:00 today]

**WEDNESDAY 19 DECEMBER 2012**

**WED 19:00 10 Things You Didn't Know About... (b008pr87)**

Tsunamis

Iain Stewart journeys across the oceans to explore the most powerful giant waves in history, with ten remarkable stories about tsunamis.

These massive waves can be taller than the biggest skyscraper, travel at the speed of a jet plane and when they reach land, rear and turn into a terrifying wall of water that destroys everything in its path. These unstoppable, uncontrollable forces of nature caused the ruin of an entire ancient civilization, may have played a small part in the demise of the dinosaurs, and in World War II were used as a weapon. Yet astonishingly, two men who surfed the tallest wave in history - half a kilometre high - survived.

**WED 20:00 Jet! When Britain Ruled the Skies (b01m9vj)**

The Shape of Things to Come

In the heady years following World War II, Britain was a nation in love with aviation. Having developed the jet engine in wartime, British engineers were now harnessing its power to propel the world's first passenger jets. By 1960 the UK's passenger airline industry was the largest in the world, with routes stretching to the furthest-flung remnants of Empire.

And the aircraft carrying these New Elizabethans around the globe were also British - the Vickers Viscount, the Bristol Britannia and the world's first pure jet-liner, the sleek, silver De Havilland Comet, which could fly twice as high and twice as fast as its American competitors. It seemed the entire nation was reaching for the skies to create the shape of things to come for air travel worldwide. But would their reach exceed their grasp?

**WED 21:00 Rome: A History of the Eternal City (b01pdt0s)**  
The Rebirth of God's City

Simon Sebag Montefiore charts Rome's rise from the abandonment and neglect of the 14th century into the everlasting seat of the papacy recognised today. His story takes us through the debauchery and decadence of the Renaissance, the horrors of the Sack of Rome and the Catholic Reformation, through to the arrival of fascism and the creation of the Vatican State. By taking us inside Rome's most sensational palaces and churches and telling the stories behind some of the world's most beloved art, Sebag Montefiore's final instalment is a visual feast.

**WED 22:00 The Golden Age of Steam Railways (b01pdsy6)**  
[Repeat of broadcast at 21:00 on Monday]

**WED 23:00 Old Jews Telling Jokes (b017j5jw)**  
Episode 2

In the fine tradition of American Jewish humour, a group of pensioners from all walks of life gather together to tell their favourite jokes. Remember, laugh loud. They don't hear so good.

**WED 23:30 Jet! When Britain Ruled the Skies (b01m9vj1)**  
[Repeat of broadcast at 20:00 today]

**WED 00:30 10 Things You Didn't Know About... (b008pr87)**  
[Repeat of broadcast at 19:00 today]

**WED 01:30 Punk Britannia (b01jv7f2)**  
Post-Punk 1978-1981

Punk had shown what it was against - now what was it for? In the wake of the Pistols' demise a new generation of musicians would re-imagine the world they lived in through the music they made. Freed up by punk's DIY ethos, a kaleidoscope of musical influences broke three chord conformity.

Public Image Limited allowed Johnny Rotten to become John Lydon the artist. In Manchester, Magazine would be first to record in the wake of the Pistols' split, Mark E Smith made street poetry while Ian Curtis turned punk's external rage into an existential drama. A raft of left-wing art school intellectuals like Gang of Four and Wire imbued post-punk with a sense of radical politics and conceptualism while the Pop Group infused funk with anti-capitalist sentiment in the early days of Thatcher. Flirting with fascism and violence, the working class Oi! movement tried to drag punk from the Kings Road into the heart of the East End whilst Anarcho punks Crass embarked on the most radical vision of any.

In a time beset by dread and tension perhaps the biggest paranoia was Mutually Assured Destruction essayed perfectly by Young Marble Giants' Final Day. Released in the height of Thatcherism, Ghost Town by The Specials marked a parting of the post-punk waves. Some would remain awedly uncommercial whilst others would explore pop as a new avenue in the new decade. The song that perhaps summed up post-punk's journey was Orange Juice's Rip It Up and Start Again.

With John Lydon, Howard Devoto, Mark E Smith, Peter Hook, Jerry Dammers, The Raincoats, Wire, Jah Wobble, Mark Stewart, Edwyn Collins, Young Marble Giants and many more.

**WED 02:30 Rome: A History of the Eternal City (b01pdt0s)**  
[Repeat of broadcast at 21:00 today]

#### THURSDAY 20 DECEMBER 2012

**THU 19:00 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 Shackelford, the self-styled 'Wizard of Odds'; and chief economist of the Bank of England, Spencer Dale.

**THU 20:00 Top of the Pops (b01phjlp)**  
08/12/77

Tony Blackburn looks at the weekly pop chart from 1977 and introduces Generation X, Hot Chocolate, Manfred Mann's Earth Band, Bonnie Tyler, Graham Parker & the Rumour, the Banned, the Bee Gees, Wings, Bing Crosby and a Legs & Co dance sequence.

**THU 20:30 Top of the Pops (b01phjlr)**  
15/12/77

Guest DJ Elton John looks at the weekly pop chart from 1977 and introduces Carl Douglas, the Emotions, Darts, John Otway & Wild Willy Barrett, the Dooleys, Dooley Wilson, Julie Covington, Wings and a Legs & Co dance sequence to Jonathan Richman.

**THU 21:00 Michael Grade's History of the Pantomime Dame (b01pdt40)**

Michael Grade explores the rich history of the very British pantomime dame. From the extravagant productions in Drury Lane in the 19th century to the vintage performances by Terry Scott and Arthur Askey, the dame has always been anarchic, witty, vulgar, affectionate and good box office.

Berwick Kaler, who has played the panto dame for 30 years at York's Theatre Royal, and The Good Life star Richard Briers, offer their insights into why the role has remained such a favourite.

Presenter and TV mogul Grade bravely tries on the full make-up and frock to explore what it is that has made the pantomime dame such an enduring feature of British life.

**THU 22:00 The Dark Ages: An Age of Light (b01pdt02)**  
[Repeat of broadcast at 21:00 on Tuesday]

**THU 23:00 Chas & Dave: Last Orders (b01Inkdv)**  
[Repeat of broadcast at 21:00 on Sunday]

**THU 00:00 Tails You Win: The Science of Chance (p00yh2rc)**

[Repeat of broadcast at 19:00 today]

**THU 01:00 A Very English Winter: The Unthanks (b01pdsvd)**  
[Repeat of broadcast at 20:00 on Sunday]

**THU 02:00 Top of the Pops (b01phjlp)**  
[Repeat of broadcast at 20:00 today]

**THU 02:30 Top of the Pops (b01phjlr)**  
[Repeat of broadcast at 20:30 today]

**THU 03:00 Michael Grade's History of the Pantomime Dame (b01pdt40)**  
[Repeat of broadcast at 21:00 today]

#### FRIDAY 21 DECEMBER 2012

**FRI 19:00 Concerto at the BBC Proms (b01k763t)**  
Mozart Clarinet

Another chance to hear a live performance from the BBC Proms at the Royal Albert Hall of Mozart's Clarinet Concerto in A major, considered by some to be his finest work, recorded at the BBC Proms in 2006.

Gifted English clarinet soloist Julian Bliss, at the time only 17 years old, performs with the BBC Symphony Orchestra under the baton of conductor Jiri Behlohlávek.

**FRI 19:30 Plácido Domingo's Gala Concert from the Royal Opera House (b01pdt87)**

From the Royal Opera House, Covent Garden, Katie Derham introduces a gala concert in celebration of Plácido Domingo, one of the greatest figures in the world of music. On stage with the Orchestra of the Royal Opera House conducted by Antonio Pappano are some of the finest singers of today performing selected gems of the operatic repertory. Opera stars Nina Stemme, Joyce DiDonato, Joseph Calleja, Rolando Villazón perform alongside voices new to Covent Garden - Stefan Pop, Julia Novikova and Sonya Yoncheva.

**FRI 21:00 It's Slade (b01pf7kr)**  
They definitely know "IT'S CHRISTMAAAASSSS!"

Top pop documentary, narrated by Radio One's Mark Radcliffe, about one of Britain's greatest and best-loved bands. Slade scored six number ones in the 70s, a feat rivalled only by Abba. Formed in Wolverhampton and led by Noddy Holder, Slade sold over 50 million records worldwide during a 20-year career which saw them re-invent themselves as skinhead yobs, then mirror-hatted platform-shoe-pioneering glam gods, before finally re-emerging as hard rock heroes.

Their poorly-spelled, self-written selection of terrace anthems included Cum on Feel the Noize, Coz I Luv You, Take Me Bak Ome, Mama Weer All Craze Now and, unforgettably, Merry Xmas Everybody. Apart from Noddy and his bandmates - Dave Hill, Jim Lea and Don Powell - the cast here also includes Noel Gallagher of Oasis (who covered Cum On Feel the Noize), Status Quo, Toyah Wilcox, Suzi Quatro and Ozzy Osbourne.

Altogether now "Are you hanging up your stocking on the wall.....?"

**FRI 21:50 Slade at the BBC (b01pdt89)**

Don your best platforms and sequined hat and join Noddy, Jim, Dave and Don aka Slade for a trip down memory lane as we uncover some of Slade's finest appearances from the vaults of the BBC archive, introduced by none other than Noddy Holder himself.

Rock out to the classics of Coz I Luv You, Mama Weer All Craze Now, Gudbuy T'Jane and C\*m On Feel the Noize and see how Slade's all-important look evolves after their first TV appearance on the BBC back in 1969. Most performances come from their 70s heyday and from BBC studio shows like Top of the Pops, Crackerjack, Blue Peter and Cheggers Plays Pop.

Noddy both introduces the compilation and reflects on Slade's glory days at the BBC.

**FRI 22:50 Slade in Flame (b008pftf)**

British glam rock superstars Slade made their collective acting debut in this drama about a pop group's struggles with success. In the late 1960s, Barry, Paul and Charlie are musicians who are barely making a living playing pub dates, weddings, and socials backing up egocentric vocalist Jack Daniels.

*FRI 00:20 It's Slade (b01pf7kr)*  
[Repeat of broadcast at 21:00 today]

*FRI 01:10 Slade at the BBC (b01pt89)*  
[Repeat of broadcast at 21:50 today]

*FRI 02:10 Placido Domingo's Gala Concert from the Royal Opera House (b01pt87)*  
[Repeat of broadcast at 19:30 today]