

SATURDAY 19 AUGUST 2017

SAT 19:00 The Brain with David Eagleman (b06yrqzh)
What Makes Me?

Series in which Dr David Eagleman takes viewers on an extraordinary journey that explores how the brain, locked in silence and darkness without direct access to the world, conjures up the rich and beautiful world we all take for granted.

This episode explores the question of how the brain gives rise to our thoughts, emotions, memories and personality. We see how the process of becoming 'you' starts at birth. The brain of a newborn baby is not yet fully developed, instead it grows and shapes itself around life experience.

Wiring up begins immediately, and rapidly, as the child's brain starts to adapt to whatever situation - culture, habitat, language - it's born into. This allows humans to flourish in any stimulating environment, but as the story of three Romanian orphans reveals, a lack of social contact and stimulation can result in permanent brain damage as the brain fails to make vital connections in those critical early years.

Tracing the development of the brain - the 'making of you' - through a lifetime, Dr Eagleman tests the social stress levels of teenagers as their brains go through profound changes, meets London cabbies whose intense training to memorise street maps physically alters the shape of their hippocampus, and joins a group of elderly nuns who are defying the symptoms of Alzheimer's by keeping their brains active and building up 'cognitive reserve'.

As we make new memories, learn new skills and have life experiences, the brain is constantly and dynamically rewiring itself. It never stops. Nor do we - the human brain is always changing, and therefore so are we. From cradle to grave, we are works in progress.

SAT 20:00 Fossil Wonderlands: Nature's Hidden Treasures (b03xsfrq)
Weird Wonders

Professor Richard Fortey journeys high in the Rocky Mountains to explore a 520 million-year-old fossilised seabed containing bizarre and experimental life forms that have revolutionised our understanding about the beginnings of complex life. Among the amazing finds he uncovers are marine creatures with five eyes and a proboscis, filter-feeders shaped like tulips, worm-like scavengers covered in spikes but with no identifiable head or anus, and a metre-long predator resembling a giant shrimp.

SAT 21:00 Inspector Montalbano (b08nqzt1)
A Delicate Matter

Drama based on the books featuring the idiosyncratic Sicilian detective. Montalbano is visiting Livia in Boccadasse when he is called back to Vigata to investigate the murder of a 70-year-old prostitute - as well as disturbing accusations at an elementary school.

In Italian with English subtitles.

SAT 22:55 Bob Monkhouse: The Last Stand (b086tw3q)
Summer 2003: Bob Monkhouse entertains a room full of comedians with stand-up, chat and a comedy masterclass. The night became the stuff of legend among comedians but was not transmitted until much later.

SAT 00:00 The Secret Life of Bob Monkhouse (b00x9b7w)
The extraordinary story of comedian Bob Monkhouse's life and career, told through the vast private archive of films, TV shows, letters and memorabilia that he left behind.

SAT 01:25 David Bowie and the Story of Ziggy Stardust (b01k0y0n)

The Rise and Fall of Ziggy Stardust and the Spiders from Mars is arguably the most important album in the mind-blowing career of David Bowie. Released in 1972, it's the record that set the mercurial musician on course to becoming one of the best-known pop stars on the planet. In just over a year, Bowie's messianic Martian invaded the minds of the nation's youth with a killer combination of extraterrestrial rock 'n' roll and outrageous sexuality, all delivered in high-heeled boots, multicoloured dresses and extravagant make-up. In Bowie's own words, Ziggy was 'a cross between Nijinsky and Woolworths', but this unlikely culture clash worked - Ziggy turned Bowie into stardust.

This documentary tells the story of how Bowie arrived at one of the most iconic creations in the history of pop music. The songs, the hairstyles, the fashion and the theatrical stage presentation merged together to turn David Bowie into the

biggest craze since the Beatles. Ziggy's instant success gave the impression that he was the perfectly planned pop star. But, as the film reveals, it had been a momentous struggle for David Bowie to hit on just the right formula that would take him to the top.

Narrated by fan Jarvis Cocker, it reveals Bowie's mission to the stars through the musicians and colleagues who helped him in his unwavering quest for fame - a musical voyage that led Bowie to doubt his true identity, eventually forcing the sudden demise of his alien alter ego, Ziggy.

Contributors include Trevor Bolder (bass player, Spiders from Mars), Woody Woodmansey (drummer, Spider from Mars), Mike Garson (Spiders' keyboardist), Suzi Ronson (Mick Ronson's widow, who gave Bowie that haircut), Ken Scott (producer), Elton John (contemporary and fan), Lindsay Kemp (Bowie's mime teacher), Lee Black Childers (worked for Mainman, Bowie's production company), Cherry Vanilla (Bowie's PA/press officer), George Underwood (Bowie's friend), Mick Rock (Ziggy's official photographer), Steve Harley, Marc Almond, Holly Johnson, Peter Hook, Jon Savage, Peter Dinklage and Dylan Jones.

SAT 02:30 Fossil Wonderlands: Nature's Hidden Treasures (b03xsfrq)
[Repeat of broadcast at 20:00 today]

SUNDAY 20 AUGUST 2017

SUN 19:00 Do We Really Need the Moon? (b00yb5jp)

The moon is such a familiar presence in the sky that most of us take it for granted. But what if it wasn't where it is now? How would that affect life on Earth?

Space scientist and lunar fanatic Dr Maggie Aderin-Pocock explores our intimate relationship with the moon. Besides orchestrating the tides, the moon dictates the length of a day, the rhythm of the seasons and the very stability of our planet.

Yet the moon is always on the move. In the past, it was closer to the Earth and in the future it will be farther away. That it is now perfectly placed to sustain life is pure luck, a cosmic coincidence. Using computer graphics to summon up great tides and set the Earth spinning on its side, Aderin-Pocock implores us to look at the Moon afresh: to see it not as an inert rock, but as a key player in the story of our planet, past, present and future.

SUN 20:00 BBC Proms (b092710v)
2017

Bach's St John Passion

In one of a series of Proms performances marking the 500th anniversary of the Protestant Reformation, John Butt directs his Dunedin Consort in a complete performance of Bach's powerful St John Passion, with Nicolas Mulroy as the Evangelist and Matthew Brook as Jesus. Reflecting the church setting for which it was written, the performance includes congregational singing from the Proms audience.

SUN 22:40 The Treasure Hunters (b040r3bv)
Raw Treasure

From pirates' hoards and shipwrecked booty to dazzling gems to precious metals, we lust after treasure, fight over it and go to the ends of the earth to find it - our planet is a treasure chest just waiting to be opened. In this series, Ellie Harrison and Dallas Campbell journey around the globe on the ultimate treasure hunt.

They scratch the surface of our planet to uncover its most extraordinary riches - from mountains of gold to the most valuable gemstones in the world and the largest natural treasure ever found.

In this episode, Ellie ventures down one of the deepest gold mines in the world in search of the gleaming metal that was once thought to be the skin of the gods and the sweat of the sun. Dallas free-dives for lustrous pearls in the waters around north west Australia and, using one of the largest treasure-hunting machines, he seeks out diamonds from the bottom of the ocean.

Dallas and Ellie reveal how you could make your fortune on the beach. Lumps of ambergris can wash up on almost any shoreline in the world. Although it starts life in a sperm whale's stomach, it ends up as a costly raw ingredient in the most expensive perfumes.

And while Dallas tries his hand at opal mining in one of the most hostile places on earth, Ellie discovers how one of the largest and most unusual treasures ever uncovered has helped us solve a 67-million-year-old puzzle.

SUN 23:40 The Treasure Hunters (b040zb5q)

Man-made Treasure

Ellie Harrison and Dallas Campbell reveal the greatest treasures we've ever created.

Dallas braves vicious currents to dive on a shipwreck where gold, silver and 5,000 emeralds have been found. Ellie tells the tale of intrigue and obsession surrounding a jewelled room in Russia decorated with millions of pounds worth of amber. She enters the secretive world of the diamond cutters - each lives with the knowledge that a slip of the hand could cost them millions of pounds.

SUN 00:40 James May at the Edge of Space (b00lc5ph)

James May always wanted to be an astronaut. Now, 40 years after the first Apollo landings, he gets a chance to fly to the edge of space in a U2 spy plane. But first he has to undergo three gruelling days of training with the US Air Force and learn to use a space suit to stay alive in air so thin it can kill in an instant. He discovers that during the flight there are only two people higher than him, and they are both real astronauts on the International Space Station.

SUN 01:10 The Rules of Abstraction with Matthew Collings (b04gv5kl)

Documentary in which painter and critic Matthew Collings charts the rise of abstract art over the last 100 years, whilst trying to answer a set of basic questions that many people have about this often-baffling art form. How do we respond to abstract art when we see it? Is it supposed to be hard or easy? When abstract artists chuck paint about with abandon, what does it mean? Does abstract art stand for something or is it supposed to be understood as just itself?

These might be thought of as unanswerable questions, but by looking at key historical figures and exploring the private world of abstract artists today, Collings shows that there are, in fact, answers.

Living artists in the programme create art in front of the camera using techniques that seem outrageously free, but through his friendly-yet-probing interview style Collings immediately establishes that the work always has a firm rationale. When Collings visits 92-year-old Bert Irvin in his studio in Stepney, east London, he finds that the colourful works continue experiments in perceptual ideas about colour and space first established by abstract art pioneers such as Paul Klee and Wassily Kandinsky in the 1910s.

Other historic artists featured in the programme include the notorious Jackson Pollock, the maker of drip paintings, and Mark Rothko, whose abstractions often consist of nothing but large expanses of red. Collings explains the inner structure of such works. It turns out there are hidden rules to abstraction that viewers of this intriguing, groundbreaking programme may never have expected.

SUN 02:40 The Art of Australia (b03f48np)
Beyond Australia

Edmund Capon explores how, from the 1960s onwards, Australia and its art went global. Transformed into a migrant nation, Australia's dependence on Britain and Europe ended and artists and nation alike turned their attention to America and then Asia. And it was the world's most ancient art form, indigenous art from the heart of the continent, that would become modern Australia's instantly recognisable calling card.

MONDAY 21 AUGUST 2017

MON 19:00 World News Today (b092491w)

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

MON 19:30 The River Taff with Will Millard (b070148y)

Series 1

Episode 3

Writer and fisherman Will Millard reaches the end of his journey down the River Taff in south Wales. This beautiful wild river, once neglected and polluted, has now come back to life. Will goes wild swimming with a group of eccentrics trying to change the image of this forgotten river. He meets retired Somali sailors drawn to Cardiff in the city's glory days as a thriving port and tells the story of how the industrial docks have been transformed. Finally, he sets out to catch the king of fish, migratory salmon returning to the river where they were born.

MON 20:00 Timeshift (b068fvln)

Series 15

The Trains That Time Forgot: Britain's Lost Railway Journeys

Timeshift journeys back to a lost era of rail travel, when trains had names, character and style. Once the pride of the railway companies that ran them, the named train is now largely consigned to railway history.

Writer and presenter Andrew Martin asks why we once named trains and why we don't do so anymore. He embarks on three railway journeys around Britain, following the routes of three of the most famous named trains - the Flying Scotsman, the Cornish Riviera Express and the Brighton Belle. We reflect on travel during the golden age of railways - when the journey itself was as important as reaching your destination - and compare those same journeys with the passenger experience today.

MON 21:00 Vikings (b01n3gbj)
Episode 3

Neil Oliver explores how the Viking Age finally ended, tracing the Norse voyages of discovery, the first Danish kings, and the Christian conversions that opened the door to European high society. He also uncovers the truth about England's King Canute - he was not an arrogant leader who thought he could hold back the waves, but the Viking ruler of an entire empire of the north and an early adopter of European standardisation.

MON 22:00 Storyville (b092s5vv)
Silk Road: Drugs, Death and the Dark Web

Documentary looking at the black market website known as the Silk Road, which emerged on the darknet in 2011. This 'Amazon of illegal drugs' was the brainchild of a mysterious, libertarian intellectual operating under the avatar The Dread Pirate Roberts. Promising its users complete anonymity and total freedom from government regulation or scrutiny, Silk Road became a million-dollar digital drugs cartel.

Homeland Security, the DEA, the FBI and even the Secret Service mounted multiple investigations in the largest online manhunt the world had ever seen. But it would be a young tax inspector from the IRS, who had grown up in the projects of Brooklyn, who would finally crack the case and unmask 'DPR'.

With unparalleled access, Silk Road is a thrilling cat-and-mouse crime story for the digital age, bristling with intrigue, mayhem... and murder.

MON 23:30 Hidden Histories: WW1's Forgotten Photographs (b03xsrvv)

Documentary telling the extraordinary untold story of soldiers' photography in the First World War. The British and German soldiers marched off to war with secret 'vest pocket' cameras, determined to record what they thought would be a great adventure, but few were prepared for the horrors they were about to witness and photograph. Their photos - many never seen before in public - provide a deeply moving document of their lives in the trenches and their rapid loss of innocence.

With no soldier photographer alive to tell the tale, we join their close relatives on emotional journeys of discovery as they go in search of the secrets hidden within their ancestors' photographs.

This is the war viewed from a new and surprising perspective - through the eyes of the men who fought in it.

MON 00:30 Timeshift (b068fvln)
[Repeat of broadcast at 20:00 today]

MON 01:30 Vikings (b01n3gbj)
[Repeat of broadcast at 21:00 today]

MON 02:30 Rosslyn Chapel: A Treasure in Stone (b00v3y5s)

The exquisite Rosslyn Chapel is a masterpiece in stone. It used to be one of Scotland's best-kept secrets, but it became world-famous when it was featured in Dan Brown's the Da Vinci Code.

Art historian Helen Rosslyn, whose husband's ancestor built the chapel over 550 years ago, is the guide on a journey of discovery around this perfect gem of a building. Extraordinary carvings of green men, inverted angels and mysterious masonic marks beg the questions of where these images come from and who the stonemasons that created them were. Helen's search leads her across Scotland and to Normandy in search of the creators of this medieval masterpiece.

TUESDAY 22 AUGUST 2017

TUE 19:00 World News Today (b09249mp)

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

TUE 19:30 World War I at Home (b045gju5)
Cadburys at War

Brothers Laurence and Egbert Cadbury saw plenty of action during the First World War, but only one of them was a fighter. Former world champion boxer Richie Woodhall investigates the untold story of the chocolate king's sons, a tale full of conflict and conscience.

TUE 20:00 Thailand: Earth's Tropical Paradise (b08bg31f)
The Mysterious North

Northern Thailand is dominated by mountains and cloaked in forest. It hides ancient creatures and surprising partnerships. To survive here, both the wildlife and people rely on maintaining the natural harmony of the mysterious north.

TUE 21:00 Utopia: In Search of the Dream (b092sb6f)
Series 1

A Good Place Within

Art historian Richard Clay asks whether utopia is, ultimately, a state of mind. Can we find utopia within? He explores the many ways we have created to immerse ourselves in a perfect moment, of epiphany or transcendence, pushing the boundaries of artistic expression and pleasure.

Seeking answers in a broad range of arts, Richard meets digital games pioneer Sid Meier, Rada improvisation teacher Chris Heimann and opera impresario Martin Graham. He tries to compose a haiku and uncovers traces of the hedonistic medieval carnival tradition in the churches and pubs of his native Lancashire.

Richard also compares and contrasts different musical escapes, interviewing Acid House legend A Guy Called Gerald and the celebrated minimalist composer Steve Reich. This is not about the utopia of the future but about the utopia of the immediate world that we can experience now.

TUE 22:00 Inspector Montalbano (b08nqt1)
[Repeat of broadcast at 21:00 on Saturday]

TUE 23:55 The Brain with David Eagleman (b06zdnkm)
Who Is in Control?

Series in which Dr David Eagleman takes viewers on an extraordinary journey that explores how the brain, locked in silence and darkness without direct access to the world, conjures up the rich and beautiful world we all take for granted.

This episode explores the great deception that greets us each morning when we wake up - it feels as though we are in conscious control of our lives, but in fact almost every action we take, every decision we make, every belief that we hold is driven by parts of the brain that we have no access to.

Dr Eagleman reveals the electrical storm of unconscious neural activity that accompanies even the simplest of actions. We meet a patient who has lost the ability to walk without consciously controlling every movement. If he's distracted for even a moment he will fall.

To demonstrate the proficiency of the unconscious brain, Dr Eagleman competes with a ten-year-old world champion in the sport of cup stacking. Wearing EEG caps to record their brain activity reveals that although the champion is performing at much greater speed and precision, his brain is almost at rest. When a skill sinks below the level of conscious, controlling this allows for much greater speed and efficiency.

Dr Eagleman reveals that everything from who we find attractive to how we describe the relationship we have with our mother can be influenced by factors that we have no conscious control over. But the unconscious has a dark side, as the story of Ken Parks - who killed his mother-in-law in his sleep - demonstrates. Our consciousness is needed to arbitrate between competing systems in the brain that, left to their own devices, are liable to run amok.

Dr Eagleman ends with a brief journey through free will, and the deep question of whether we have any conscious control over our lives. Although there is tantalising evidence that we can feel as though we are consciously in control when we are not, the experimental jury is still out on whether or not free will is an illusion. However, free will or no free will, the human brain's extraordinary complexity guarantees that life will never feel predictable.

TUE 00:55 Thailand: Earth's Tropical Paradise (b08bg31f)
[Repeat of broadcast at 20:00 today]

TUE 01:55 A History of Art in Three Colours (b01lc2s)
Blue

Dr James Fox explores how, in the hands of artists, the colours gold, blue and white have stirred emotions, changed behaviour and even altered the course of history.

When, in the Middle Ages, the precious blue stone lapis lazuli arrived in Europe from the east, blue became the most exotic and mysterious of colours. And it was artists who used it to offer us tantalising glimpses of other worlds beyond our own.

TUE 02:55 Utopia: In Search of the Dream (b092sb6f)
[Repeat of broadcast at 21:00 today]

WEDNESDAY 23 AUGUST 2017

WED 19:00 World News Today (b09249p6)
The latest national and international news, exploring the day's events from a global perspective.

WED 19:30 World War I at Home (b04gkn55)
Royal Victoria Hospital

Shocking stories of the World War I Hampshire hospital doctors who faked footage on cures for shellshock. Author Philip Hoare examines the evidence and reveals some other real-life human tragedies at the Royal Victoria Hospital in Netley.

WED 20:00 Storm Troupers: The Fight to Forecast the Weather (b07cv9pp)
Episode 1

Alok Jha investigates how weather forecasting was transformed from superstition into science.

At the heart of story is pioneering meteorologist, Robert Fitzroy. Driven to prevent disasters at sea - like the wrecking of a passenger ship off the Anglesey coast in 1859 - Fitzroy issued Britain's first storm warnings and came up with the first weather forecast to be published in a newspaper.

Alok explores the knowledge Fitzroy was building on. He investigates weather folklore, asking if sayings such as 'red sky at night, shepherd's delight' have any merit. He tells the stories of the other heroes of meteorology - people like Evangelista Torricelli, a student of Galileo's, who invented the barometer; Luke Howard, who classified the clouds and Francis Beaufort, who came up with the famous wind scale.

Alok also discovers that public complaints about weather forecasts date back to the very first forecasts.

WED 21:00 South Downs: England's Mountains Green (b08fsbtk)

Peter Owen-Jones takes us into the heart of the UK's newest national park - the South Downs. Following the South Downs Way along the spine of the park, from the famous Seven Sisters cliffs to Winchester - the ancient capital of England - Peter experiences an extraordinary year exploring the park's stunning landscapes, rich history, wildlife and people. What emerges is a portrait of one of Britain's most iconic landscapes, described by William Blake as 'England's mountains green'.

WED 22:00 Tales from the National Parks (b016dr0x)
The Lake District

The National Parks are Britain's most treasured landscapes, but they are increasingly becoming battlefields. They were designated 60 years ago as places for everyone, but is that still the case? In this series the award-winning film-maker Richard Macer spent a year amid conflicts in three different parks, on a journey to discover who they are really for.

In each park the stories are very different, but there is something that unites them all - fiercely divided communities who are prepared to fight in order to preserve their right to enjoy the countryside. In each film, Macer has secured access to the National Park Authority - an organisation which looks after the landscapes and decides upon planning matters. In all of these stories the Park Authorities have a key role to play in trying to find amicable solutions to the problems which confront them.

In the Lake District, entrepreneur Mark Weir wants to build a giant zip-wire ride from the top of a beautiful, remote mountain. But does it have any chance of getting permission when there are over 400 objectors to it? Unfortunately a tragic

accident during filming means that Mark will never see if his zip-wire becomes a reality.

WED 23:00 How It Works (b01fq06h)
Plastic

Professor Mark Miodownik tells the story of plastics - created in the lab, they have brought luxury to the masses and shaped the modern age. He recounts tales of the mavericks responsible for some of plastic's most outrageous failures and heady successes, from the explosive attempts to make a replacement for ivory billiard balls to the ultimately ubiquitous Bakelite.

Investigating at atomic level, Mark discovers the extraordinary properties that have allowed plastics to dominate our world and reveals how the next generation of plastics will take its inspiration from nature, creating man-made materials which behave as though they are alive and which could help rebuild the human body.

WED 00:00 Storm Troupers: The Fight to Forecast the Weather (b07cv9p)
[Repeat of broadcast at 20:00 today]

WED 01:00 South Downs: England's Mountains Green (b08f5btk)
[Repeat of broadcast at 21:00 today]

WED 02:00 Constable: A Country Rebel (b04gv42q)
The Haywain by John Constable is such a comfortingly familiar image of rural Britain that it is difficult to believe it was ever regarded as a revolutionary painting, but in this film, made in conjunction with a landmark exhibition at the V&A, Alastair Sooke discovers that Constable was painting in a way that was completely new and groundbreaking at the time.

Through experimentation and innovation he managed to make a sublime art from humble things and, though he struggled in his own country during his lifetime, his genius was surprisingly widely admired in France.

WED 03:00 Tales from the National Parks (b016dr0x)
[Repeat of broadcast at 22:00 today]

THURSDAY 24 AUGUST 2017

THU 19:00 World News Today (b09249qg)
The latest national and international news, exploring the day's events from a global perspective.

THU 19:30 Top of the Pops (b092scmr)
Simon Bates and Peter Powell present the pop chart programme, first broadcast on 17 May 1984. Includes appearances from Break Machine, Deniece Williams, Marillion, Hazell Dean, Womack & Womack, Ultravox, Duran Duran and Kenny Loggins.

THU 20:00 Sword, Musket & Machine Gun: Britain's Armed History (b088sznj)
Rapid Fire

In the concluding episode, Dr Sam Willis charts the evolution of weaponry in Britain from 1800 to the First World War, looking at the drive to develop ever more precise weapons, from artillery shells to rifles to the Maxim machine gun.

The pace of technological change in the 19th century was phenomenal. Sam test-fires a 'Brown Bess' musket, the infantry weapon of choice at Waterloo in 1815 and discovers that a well-trained soldier could fire up to three shots a minute. He also looks at efforts to make artillery more effective on the battlefield with the invention of spherical case shot, a new type of shell that was named after its inventor - Henry Shrapnel.

Sam finds out how accessible firearms were to the public in the early 19th century and tells the little-known story of Spencer Percival, the only British prime minister ever to be assassinated, shot at point blank range in the lobby of the House of Commons in 1812.

By the turn of the 20th century, several inventors believed that they could banish war if they invented the ultimate weapon, an instrument so horrific that no-one would dare use it. In the 1880s, Hiram Maxim, an American inventor, devised the first 'Maxim' machine guns in his workshop in Hatton Garden, London. The first rapid-fire weapon to harness the energy of its own recoil, the Maxim gun, and its successor the Vickers machine gun, could fire 600 rounds a minute and were used to devastating effect on the battlefields of the First World War.

Automatic weapons were also sought by criminal gangs, as Sam discovers when he looks back at one of the most infamous sieges of the 20th century - the Siege of Sidney Street in 1911.

The series culminates in a remarkable experiment to find out whether a bulletproof vest made of silk might have stopped a bullet fired at Archduke Franz Ferdinand. With the aid of the Royal Armouries, Sam conducts a unique experiment with assistant firearms curator Lisa Traynor to prove that a bulletproof vest owned by the archduke would have stopped a bullet fired by his assassin, Gavrilo Princip. The killing of the archduke on June 28 1914 set in motion a chain of events that led to the outbreak of the First World War.

World War I was the deadliest war of its age, with the most technologically advanced firearms and weapons of almost medieval brutality used to wage a devastating conflict. When the firing finally stopped on November 11, 1918, an estimated 17 million people had died and 20 million had been wounded. In the aftermath of World War I, we now put increasing faith in treaties, international conventions and diplomacy. Surely we could never allow such carnage to happen again?

THU 21:00 Andrew Marr's The Making of Modern Britain (b00ny3mx)
The Great War

Britain gets its first taste of total war. Marr argues that no shock has ever hit these islands with quite the force of what became known as the Great War. It transformed the lives of the British people - most dramatically the millions who fought on the frontline, but also those at home who were bereaved, bombed, uprooted and bankrupted.

With vivid archive and extraordinary anecdotes, Andrew Marr tells the story of Lord Kitchener's volunteer army - the biggest in history. He also describes German gun-boat assaults on the north-east coast of England; the strange disappearance of Britain's First Sea Lord at the height of the war; the first bomb ever to fall on Britain; and the sex scandal that threatened to destroy the British establishment.

Visiting the trenches of Flanders, Marr imagines the horrors of industrialised warfare and reveals the gallows humour that thrived there. Three quarters of a million men never returned from the battlefields. At home, civilians pulled together and worked for the war effort as never before. Under the premiership of David Lloyd George, they also witnessed the birth of 'big government' in Britain.

THU 22:00 Wonders of the Universe (b00zm833)
Stardust

In the second stop in his exploration of the wonders of the universe, Professor Brian Cox goes in search of humanity's very essence to answer the biggest questions of all: what are we? And where do we come from? This film is the story of matter - the stuff of which we are all made.

Brian reveals how our origins are entwined with the life cycle of the stars. But he begins his journey here on Earth. In Nepal, he observes a Hindu cremation. Hindu philosophy is based on an eternal cycle of creation and destruction, where the physical elements of the body are recycled on to the next stage. Brian draws a parallel with the life cycle of the stars that led to our own creation.

Next, he explains how the Earth's resources have been recycled through the ages. How every atom that makes up everything we see was at some time a part of something else. Our world is made up of just 92 elements, and these same 92 elements are found throughout the entire universe. We are part of the universe because we are made of the same stuff as the universe.

THU 23:00 Horizon (b013pnv4)
2011-2012

Seeing Stars

Around the world, a new generation of astronomers are hunting for the most mysterious objects in the universe. Young stars, black holes, even other forms of life.

They have created a dazzling new set of supertelescopes that promise to rewrite the story of the heavens.

This film follows the men and women who are pushing the limits of science and engineering in some of the most extreme environments on earth. But most strikingly of all, no-one really knows what they will find out there.

THU 00:00 Top of the Pops (b092scmr)
[Repeat of broadcast at 19:30 today]

THU 00:30 Wonders of the Universe (b00zm833)
[Repeat of broadcast at 22:00 today]

THU 01:30 A History of Art in Three Colours (b01lcz2s)
[Repeat of broadcast at 01:55 on Tuesday]

THU 02:30 Sword, Musket & Machine Gun: Britain's Armed History (b088sznj)
[Repeat of broadcast at 20:00 today]

FRIDAY 25 AUGUST 2017

FRI 19:00 World News Today (b09249sj)
The latest national and international news, exploring the day's events from a global perspective.

FRI 19:30 BBC Proms (b092nc5j)
2017

Charles Mingus Revisited

A giant in 20th-century jazz, the legendary composer, bandleader and bass player Charles Mingus is celebrated by conductor Jules Buckley and his Metropole Orkest.

Plus a brilliant line-up of soloists, including saxophonist Shabaka Hutchings, trumpeter Christian Scott and singer Kandace Springs, are on the bill.

FRI 21:30 Sounds of the Sixties (b07517r4)
Reversions

Swinging Sixties 1

Forget Madchester, forget Factory, forget Oasis. Manchester never sounded better than Herman's Hermits and the Hollies, who feature in this archive extravaganza.

FRI 21:40 Blondie's New York... and the Making of Parallel Lines (b04fmgkb)

Blondie's album Parallel Lines captured the spirit of 1970s New York at a time of poverty, crime and an exploding artistic life, selling 16 million copies. This is the story of that album, that time and that city, told primarily by the seven individuals who wrote, produced and performed it. It was a calculated and painstaking endeavour to produce sure-fire hits - whatever it took.

The film follows Debbie Harry and the rest of the Blondie crew as they head into the studio to record their game-changing album with producer Mike Chapman. It also features commentary from Harry herself about writing music, the media's focus on her appearance and lyrically inspirational ex-boyfriends.

In 1978 the New York band Blondie had two punk albums behind them and were establishing a name for themselves at the club CBGBs on New York's Lower East Side. Then Chrysalis Records exec Terry Ellis saw them and spent a massive \$1m buying out their recording contract. He had to ensure that their next album was a hit - there was no room for error. To do this he brought in maverick Australian record producer Mike Chapman, who already had a string of hits under his belt. Mike's job was to turn this crew of New York punks into world stars - but did they have the popular songs which would appeal to a wider non-punk audience?

At a time when rich creativity, grinding poverty and drug abuse were hand in hand on the sidewalks of the Lower East Side, the music and lyrics of Parallel Lines celebrated and captured this vibrant and edgy chemistry, shooting the band to international stardom.

FRI 22:30 Reading and Leeds Festival (b092m66n)
2017

Kasabian

Huw Stephens introduces the headline performance by crowd-pleasers and festival favourites, Leicester's own rock 'n' roll kings, Kasabian.

Formed twenty years ago, the band have released six albums including their most recent LP For Crying Out Loud, which like the previous four long-players, went to number one in the album charts upon its release.

They will be taking to the main stage with their usual swagger, charm and big rousing anthems, five years since they last headlined the Berkshire event, led by their two inimitable frontmen, vocalist Tom Meighan and guitarist and vocalist

Sergio Pizzorno.

Highlights of many of the performances from the two main stages across the weekend are also available on the BBC Red Button, and there are live performances on iPlayer.

FRI 00:00 Totally British: 70s Rock 'n' Roll (b01r3pm9)
1970-1974

Trawled from the depths of the BBC Archive and classic BBC shows of the day - Old Grey Whistle Test, Top of the Pops and Full House - a collection of performance gems from a totally rock 'n' roll early 1970s.

This was a golden era for British rock 'n' roll as everyone moved on from the whimsical 60s and looked around for something with a bit more oomph! In a pre-heavy metal world bands were experimenting with influences that dated back to 50s rock 'n' roll, whilst taking their groove from old-school rhythm and blues. It was also a time when men grew their hair long!

In a celebration of this era, we kick off with an early 1970s Badfinger number direct from the BBC library and continue the groove from the BBC vaults with classic rock 'n' roll heroes like Free, Status Quo, the Faces, Humble Pie and Mott the Hoople. Plus from deep within the BBC archives we dig out some rarities from the likes of Babe Ruth, Stone the Crows, The Sensational Alex Harvey Band, Man, Heavy Metal Kids and original rockers Thin Lizzy... to name but a few.

Sit back and enjoy a 60-minute non-stop ride of unadulterated Totally British 70s Rock 'n' Roll!

FRI 01:00 Totally British: 70s Rock 'n' Roll (b01r7hk5)
1975-79

A romp through the BBC archive library from 1975 to 1979 has unearthed some seldom-seen performances of the rarely explored genre of pub rock and other late 70s rock 'n' roll gems from classic music programmes like the Old Grey Whistle Test and Top of the Pops. Before the DIY culture of punk took hold there was a whole breed of real musicians who honed their craft in the backrooms of pubs. And towards the end of the 70s men's hair was starting to get shorter too.

This compilation has uncovered rarely seen footage from the likes of Canvey Island's Dr Feelgood, original pub rockers Ducks DeLuxe, Eddie and the Hot Rods, Elvis Costello, Meal Ticket, Steve Gibbons Band, Dave Edmunds and chum Nick Lowe, a pre-Mike & the Mechanics' Paul Carrack in his first band Ace, a post-Faces Ronnie Lane, The Motors, the first TV performance from Dire Straits, Graham Parker and the Rumour and many more.

FRI 02:00 It's Only Rock 'n' Roll: Rock 'n' Roll at the BBC (b063m6wy)

A celebration of rock 'n' roll in the shape of a compilation of classic artists and songs, featuring the likes of Jerry Lee Lewis, Dion and Dick Dale who all featured in the Rock 'n' Roll America series, alongside songs that celebrate rock 'n' roll itself from artists such as Tom Petty (Anything That's Rock 'n' Roll), Joan Jett (I Love Rock 'n' Roll) and Oasis (Rock 'n' Roll Star).