THE PIONEER

DR LUDWIG GUTTMANN, a Jewish doctor born in Germany and specialising in spinal injuries, came to England in 1939. In 1944 he takes up a post at Stoke Mandeville hospital to treat patients with paraplegia. But Guttmann is concerned with more than the patients’ physical problems - he believes in rehabilitation. The seeds of a movement are sown...

WINTER PARALYMPICS

• 1972: The first Winter Paralympics takes place in Örnsköldsvik, Sweden. Slalom, giant slalom and Nordic skiing for amputees and visually impaired athletes are the main events. Ice sledge racing is a demonstration sport. 198 athletes from 16 countries take part. Ten subsequent Winter Paralympics take place
• 1984: Downhill is added to the programme in Innsbruck, Austria. Sit-skiiing or mono-skiing is a demonstration sport, to become a medal event at the Nagano 1998.
• 1994: Super-G is added at Lillehammer, Norway. Ice sledge hockey first features, one of the most popular attractions for spectators at the Winter Games.
• 2006: Wheelchair curling is added in Turin, Italy.
• 2010: Vancouver Games are attended by 500 athletes from 42 nations.
• 2014: Despite concerns over Russia’s military interventions in the nearby Crimean Peninsula, the Sochi Paralympic Winter Games feature 500 athletes from 45 countries in 72 medal events in five sports, and snowboarding debuts.

1948
The Stoke Mandeville Games for the Paralysed, an archery event between two teams of disabled athletes, takes place at hospital on the same day as the opening ceremony for the 1948 Summer Olympics at Wembley.

1952
The International Stoke Mandeville Games (ISMG) takes place - the first international Games, where a team from Holland also participates.

1953-1959
International Stoke Mandeville Games

1960
The ninth ISMG* takes place in Rome - overseas for the first time. It features 400 athletes from 23 countries and later becomes known as the first Paralympics. The competition is confined to those with spinal cord injuries.

1964
Tokyo, Japan: Tokyo is the last Games, until Seoul 1988, when Olympic and Paralympic athletes compete in the same city.

1968
Tel Aviv, Israel, where the Summer Games take place, is deemed unsuitable as a venue because of its high altitude and lack of oxygen.

1972
Heidelberg, Germany: Nearly 1,000 athletes from 43 countries take part.

1976
Toronto, Canada: Two new impairment groups are added in 1976 - athletes who are blind or have a visual impairment and athletes with amputations.

1980
Arnhem, Holland: Athletes with cerebral palsy compete for the first time and Ludwig Guttmann dies at the age of 80.

1984
Stoke Mandeville and New York: The Games are split over two venues, with the wheelchair events taking place at Stoke Mandeville amid stirring scenes.

1989
International Paralympic Committee (IPC) is formed on 22 September 1989 as a non-profit organisation. It aims to develop sports opportunities for all people with an impairment, from the beginner to elite level.

1992
Barcelona, Spain: Bill Trott wins six swimming golds and Tanni Grey wins her first medal of many.

1996
Atlanta, USA: The first Paralympics to get mass media sponsorship, with a budget of $83 million.

1999

2000
Sydney, Australia: In excess of one million tickets are sold to the public and Tanni Grey Thompson, at her fourth Games, wins four gold medals.

2004
Athens, Greece: Back at its birthplace, over 3,000 athletes take part. South African Oscar Pistorius, the ‘bladerunner’ (T44 sprinter category), wins his first gold medal at the Summer Games and becomes a poster boy for the movement.

2010
Tanni Grey-Thompson is created a Life Peer.

2012
London: ParalympicsGB wins 22 medals. Dave Weir, Jonnie Peacock, Sarah Storey and many more become household names, as elite sportspersons and women.

2013
Oscar Pistorius is arrested for shooting and killing his girlfriend, model Reeva Steenkamp. Found guilty of culpable homicide in September 2014, he is sentenced to five years in prison and banned from athletics for the full term.

2014
The International Paralympic Committee celebrates its 25th anniversary in September.

INVICTUS GAMES

To underline that athletes with a disability have entered the mainstream, in September 2014 The Invictus Games were attended by servicemen and women. Takes place in London, themed around Prince Harry. Some 400 competitors take part from 13 nations, over four days, competing in nine adaptive sports in world-class venues. The Games draws its name and inspiration from the iconic poem by William Ernest Henley, Invictus. The US hosted the event with its Warrior Games in 2013.


*The Paralympic Games evolved to include athletes from all disability groups, while the Stoke Mandeville games continued as a multi-sport event for wheelchair athletes, evolving to become the World Wheelchair Games and the World Wheelchair and Amputee Games.

BRITAIN IN 2015 117
THE BALANCE OF POWER
Which form of renewable energy might be suitable for you?

20-20-20 VISION
Ambitious legislation is setting the EU on course to improve the Union’s future with The Climate and Energy Package 2020. It includes the 20-20-20 targets, a set of three key objectives for 2020:

- 20% A 20% reduction in EU greenhouse gas emissions from 1990 levels
- 20% Raising the share of EU energy consumption produced from renewable resources to 20%
- 20% improvement in the EU’s energy efficiency

WHY RENEWABLE ENERGY?
1. It reduces greenhouse gas emissions
2. It diversifies availability of energy supplies
3. It reduces dependency on fossil fuels
4. It offers employment opportunities
5. It will save money on energy bills
6. You’ll be less affected by increases in the price of electricity, gas and oil
7. You’ll be more self-sufficient
8. You will have a greener home or office

THE MAIN SOURCES OF RENEWABLE ENERGY AND HOW THEY SUIT YOU

GENERATING ELECTRICITY

WIND TURBINES
WHAT ARE THEY?
- Wind turbines harness the power of the wind to generate electricity.

SUITES YOU?
- You need: an average local wind speed of 5-6m per second; no obstacles to reduce the wind speed or create turbulence; the ability to connect your property to the turbine and the national grid.

COSTS
- Depends on the size and mounting of your turbine: £2,000-£25,000 plus.

KEY BENEFITS
- Domestic systems tend to be 60-90% efficient - where efficiency measures how well the water’s power is converted into electrical power.

DISADVANTAGES
- Expensive to install.

EUROPEAN FIGURES*
- Hydropower contributed 16% to the Euro energy mix, and remained the single largest source for renewable electricity generation in the EU in 2012 at 54% of the total.

SUPERFACT
- Once installed, systems will last 40-50 years.

SOLAR ELECTRICITY
WHAT IS IT?
- Solar panels use sunlight to generate electricity.

SUITES YOU?
- Ideally a solar PV system should face between southeast and southwest, and be free of shade.
- For best performance they should be angled at 30 to 40°.

COSTS
- Depending on how much electricity you want to generate: £4,000-£8,000.

KEY BENEFITS
- Easy to install, needs little maintenance and estimated to last 40 years.
- Solar panels are heavy, so your roof must be sturdy.
- Shade falling on roof will reduce the performance.

EUROPEAN FIGURES
- In 2012, the growth in electricity from solar power was 252 times higher than ten years earlier.

SUPERFACT
- Snow transmits diffused light so unless a covering is heavy output from solar PV system shouldn’t be affected much.

BIOMASS
WHAT IS IT?
- The main fuel is wood as logs, pellets or wood chips, but also animal, food and industrial waste, and high-energy crops such as rape and maize. Systems burn the fuel to provide warmth in a single room or power central heating and hot water boilers.

SUITES YOU?
- Stoves are suitable for any room with a chimney or flue.
- Needs space to store fuel, or for a large biomass boiler.

COSTS
- Automated wood pellet stove £2,000-£4,000 including installation.
- Boilers £5,000-£11,000 including installation. Plus ongoing fuel costs.

KEY BENEFITS
- Solar panels are compatible with most existing hot water systems.
- Wood pellet stoves create less ash than wood log ones.
- Fans on stoves are noisy.

EUROPEAN FIGURES
- From 2002 to 2012, the quantity of electricity generated from biomass more than doubled.

SUPERFACT
- China accounts for over 80% of the world’s new solar hot water installations*

GENERATING HEAT/HOT WATER

SOLAR HEAT & HOT WATER
WHAT IS IT?
- Solar thermal systems capture the free heat from the sun and use it to heat water for use in the home.

SUITES YOU?
- The ideal situation for solar panels is facing due south.
- You need between 1m² and 2m² of collector (solar panels) per person living in the house.

COSTS
- Systems are likely to cost between £3,900 for a two-person household to £5,000 for a six-person home.

KEY BENEFITS
- Solar panels are compatible with most existing hot water systems.
- Shade on the panels at any time of day will reduce the performance.

EUROPEAN FIGURES
- Solar energy accounted for 5% of the EU energy mix in 2012.

SUPERFACT
- China accounts for over 80% of the world’s new solar hot water installations*
SOME KEY FACTS
• Global military expenditure was $1.747 billion in 2013.
• Total military expenditure by the top 15 was $1.408 billion in 2013.
• Total spending fell by 1.9% between 2012 and 2013. This was the second consecutive year in which spending fell.
• Military spending fell in the West - North America, Western and Central Europe, and Oceania - but increased in all other regions.

INTERNATIONAL
• Total spending fell by 1.9% billion in 2013.
• Military spending $1,747 billion in 2013.
• Global military expenditure $1,408 billion in 2013.

THE TOP 15
The following countries were the top 15 spenders in 2013:
1. US
2. China
3. Russia
4. Saudi Arabia
5. France
6. UK
7. Germany
8. Japan
9. India
10. South Korea
11. Italy
12. Brazil
13. Australia
14. Turkey
15. UAE

Military spending by the US fell by 7.8%, to $640 billion. A large part of the fall can be attributed to the reduction in spending on overseas military operations.

Military spending increase of 4.8% and, for the first time since 2003 it spent a bigger share of its GDP on the military than the US.

Hey Big Spender!
77%
Afghanistan had the world’s highest increase in military expenditure in 2013 at 77% - a spending increase of 557% since 2004.

$1,293m
Much of the total of $1,293m was spent on salaries and wages for the national army as the country built its defence and security forces in preparation for the departure of other foreign forces at the end of 2014.
STREET LIFE
Retail businesses that have recently hit the skids or scaled the heights

2014
• ATHENA The once-famous chain of 60 poster and art shops, founded in 1964, closed the last of its remaining stores in September.

• COMET Britain’s second-largest electrical retailer, established in 1933, went into liquidation in 2011 with the loss of 7,000 jobs. The taxpayer has borne high costs during a long and painful process of administration.

• LA SENZA The lingerie retailer with 55 stores went into administration for the second time in two years. There were more than 750 employees. The business is continuing to trade while looking for a new owner, although the website is closed.

• JANE NORMAN The women’s fashion chain went into administration for the second time in three years at the end of June 2014. There were 54 full-time staff and around 100 part-time.

2013
• TIE RACK The necktie, scarf and accessories fashion retailer closed its 44 high-street stores and continued as an online retailer. In the 1980s there were 450 stores.

• BLOCKBUSTER The games and DVD rental chain announced it would enter administration for the second time in the year. There were 246 stores and 2,000 employees.

• BARRATTS The high-street shoe store went into administration for the third time in four years. It shrank from more than 350 stores in 2009 to 45 in 2013. There were more than 1,000 staff.

• PAST TIMES The 51 stores that continued to trade under administration were all closed. The website was purchased by WHSmith, which bought the Past Times brand but this has since shut down. It previously went bust in 2005 and was acquired by Epic Private Equity. Epic also owns Whittards, the tea company, which is not affected by Past Times’ problems.

• HMV The last UK chain of music and entertainment stores went into administration after a week Christmas and years of fighting a losing battle against downloads and online retailers. There were 238 stores and 4,350 employees.

2012
• JJB SPORTS The struggling sportswear retailer with 4,000 staff and 180 stores went into administration in September. Its 20 best stores were bought by Sports Direct and a few others were picked up by other retailers, but the rest closed and the staff were made redundant.

• JULIAN GRAVES The natural food store was one of the first retailers to go into administration in July. There were around 189 stores and 755 employees, mostly part-time.

• CLINTON CARDS The business operated 628 Clinton and 139 Birthdays stores and went into administration early in May. There were 8,500 employees.

• AQUASCUTUM The famous fashion name bought by Harold Tilman was placed into administration in April. The company dated from 1851, making waterproof coats for British soldiers in the Crimean War.

HOPE STREET
It’s not all doom and gloom on the high street. Entrepreneurial hotspots are lighting up the UK to offer promise of growth. And if businesses adapt to public needs, a brighter future awaits...

526,446 businesses were registered with Companies House as of January 2014, compared to 484,224 recorded in 2012 and 440,600 in 2011.

136,939 No surprise that in Greater London 135,000+ businesses were registered, but Birmingham and Manchester are also areas to head for if you’re a would-be entrepreneur.

TOWN & CITY CENTRE OCCUPANCY
The face of the high street has changed in recent years. Here are the ups and downs in fortunes of various occupiers:

- Music shops DOWN 45%
- Greetings card shops DOWN 32%
- Travel-agents DOWN 31%
- Off licences DOWN 21%
- Book shops DOWN 19%
- Pubs DOWN 8%
- Convenience stores UP 153%
- Cafés UP 75%
- Betting shops UP 43%
- Charity shops UP 34%
- Fast food outlets UP 30%
- Restaurants UP 20%

HOW TO RE-IGNITE THE HIGH STREET
Mary Portas, the retail guru employed by the government to conduct an independent review of the high street with The Portas Review recently highlighted five key areas of dissatisfaction from shoppers and their requirements for greater levels of satisfaction from the high street:

1 Free parking (60%)
2 Choice of stores (59%)
3 Independent stores (57%)
4 Specialist shops eg, butcher (50%)
5 Parking spaces (48%)

While hoping to see fewer:
1 Charity shops (31%)
2 Betting shops (52%)

Sources: 1. Helping People Make Great Places (Association of Town & City Management); 2. Figures = change in total units; 3. Why Our High Streets Still Matter (www.maryportasagency.com)
WON’T YOU PLEASE, PLEASE, HELP ME!
How does a student in 2014 piece together the financing jigsaw puzzle?

STUDENT FINANCE FACTS IN FIGURES
Since new charging structures were implemented in 2012, there are important changes in student financing*

- The maximum universities can charge for tuition fees in 2014 - a three-fold increase on 2011
- How much full-time students can apply for as a maintenance loan (more if in London)
- The average university graduate student debt
- When you have a job you pay back 9% of everything you earn over £21,000 per annum

HOW CONCERNED ARE STUDENTS ABOUT MONEY?

- 4/5 constantly worry about money
- 46% find this affects their studies
- 58% find this affects their diet
- 1/3 students have never budgeted

HOW DO STUDENTS SPEND THEIR MONEY?

- £735 per month
- Travel: £24
- Clothes: £24
- Books: £23
- Other: £24
- Rent: £365
- Social: £64
- Food: £105
- Bills: £58
- Drugs: £5

HOW DO STUDENTS FEEL ABOUT STUDENT LOANS?

- 50% worry about repaying a student loan
- 55% don’t understand loan repayment conditions
- 80% worry about life after university

HOW DO STUDENTS EARN MONEY?
The average student in 2014 spends £735 a month. The average maintenance loan (for a student living outside of London) only covers £458 of living costs monthly, so where are students finding the extra £277 of income to supplement their spending?

HOW MUCH DO STUDENTS HAVE IN SAVINGS?

- £350 on average
- £100 - £500
- £500 - £1,000
- £1,000 - £2,500
- £2,500 - £5,000
- £5,000 - £10,000
- £10,000 - £21,000
- >£21,000

INTERESTING WAYS STUDENTS MAKE EXTRA DOSH

- I once had to pretend I was dating a girl, and her dad paid me for it
- Selling used soap online
- Selling plums grown in my garden
- Webcam girl during college
- Butler in the buff
- I’ve taken trolleys back to Sainsbury’s so I can have the pound in them

Sources: Student Money Survey 2014, www.savethestudent.org *For more details see www.savethestudent.org
Differences that Count? People between attitudes in Age and Foreign Policy Beliefs: Britons on the topic of foreign policy represent a national sample of 5,125.

Due to their foreign policy attitudes that differ, many other forms of international engagement further cloud our crystal ball. The possibility that future events may change or if they will constitute a distinct change or if they will constitute a distinct whether their attitudes will be seen whether their attitudes will change or if they will constitute a distinct.

As these people have grown, the electorate grows older, it remains to the youngest (18-30-year-olds) group. When British troops were not engaged in one or both of the conflicts in Iraq or Afghanistan. As these people have grown, they have foreign policy attitudes that differ yet experienced a time in their adult years when British troops were not engaged in one or both of the conflicts in Iraq or Afghanistan. As these people have grown, they have foreign policy attitudes that differ yet experienced a time in their adult years when British troops were not engaged in one or both of the conflicts in Iraq or Afghanistan.

The youngest group of Britons on the topic of foreign policy is interesting to ask if they would vote to leave rises to 41 per cent where we see the largest age differences. It is on choices in a potential EU referendum and on the issue of immigration comes to Britain’s future in the European Union. It is on choices in a potential EU referendum and on the issue of immigration comes to Britain’s future in the European Union. There are limits to what our data can

Although there was clear opposition, engagement further clouds our crystal ball. The possibility that future events may change or if they will constitute a distinct whether their attitudes will be seen whether their attitudes will change or if they will constitute a distinct.

There are limits to what our data can
What does the state of our prisons say about the British penal system?

SOME FACTS ABOUT BRITISH PRISONS

84,305
Between June 1993 and June 2012 the prison population in England and Wales increased by 41,800 prisoners to over 86,000. In May 2014 it hit 84,305.

£36,808
The average annual overall cost of a prison place in England and Wales for 2012-13 was £36,808. This has fallen since 2008-09 from £45,000.

4.8
The ratio of prison officers to prisoners in 2000 was 1.2:9. By the end of September 2013 this had increased to 4.8 prisoners for each prison officer.

215 DEATHS
In 2013 there were 215 deaths in custody, the highest number on record.

Source: Bromley briefings Summer 2014, Prison Reform Trust

WORMWOOD SCRUBS

TIMELINE

1875-1891
The prison was built

1902
The last female prisoner was transferred to HMP Holloway

1922
One wing became a borstal

1939-45
During World War II the prison was used by the War Department

1946
Two of four wings were refurbished to modern standards, and a fifth wing completed

1979
IRA prisoners staged a rooftop protest over visiting rights. 60 inmates and some prison officers were injured

1990s
An investigation into alleged staff brutality was conducted, resulting in staff suspensions and millions in compensation to prisoners

1994
A new hospital wing was completed

1996
The prison, by virtue of its iconic gate, was Grade II listed

2004
An HMP report stated that prison conditions were improved after fundamental changes

2009

2014

1. George Blake
The former British spy and double agent was discovered in 1961 and sentenced to 42 years in prison. He escaped from the prison in 1966 to flee to the USSR.

2. Pete Doherty
The pop star was jailed in April 2008 for 14 weeks for breaching a probation order after a string of drugs and driving offences.

3. Keith Richards
In 1967 the Rolling Stones legend was sentenced to a year in prison for drug offences. He only spent one night in jail before being released on bail.

4. John Stonehouse
After faking his own death in 1974 to avoid recriminations over financial irregularities, in 1976 the Labour Minister was sentenced to seven years for fraud.

5. Charlie Croker
Whether master criminal or over-ambitious small-time crook, Michael Caine’s cockney character spends a spell in the Scrubs in the iconic Sixties film, The Italian Job.

Sources: *Her Majesty’s Inspectorate of Prisons* report on Wormwood Scrubs, September 2014; The Howard League for Penal Reform

FAMOUS FORMER INMATES

1. George Blake
2. Pete Doherty
3. Keith Richards
4. John Stonehouse
5. Charlie Croker
GETTING A GRIP ON DEMENTIA
The figures behind a disease that is increasingly affecting British society

DIFFERENT TYPES OF DEMENTIA

Alzheimer's disease
The most common cause of dementia. Symptoms include memory loss and mood changes as the brain is affected, leading to the death of brain cells.

Vascular dementia
This is caused by problems in the supply of blood to the brain, typically after a stroke, for example.

Dementia with Lewy bodies
Small round structures (Lewy bodies) develop inside nerve cells leading to the degeneration of brain tissue, which can be a precursor to DLB and Parkinson's disease.

Fronto-temporal dementia
Nerve cells in the frontal and/or temporal lobes of the brain die, leading to behavioural changes and language problems.

Creutzfeldt-Jakob disease
Variant CJD hit the news when it developed in people who had eaten meat from cattle infected with bovine spongiform encephalopathy (BSE) in the 1980s, leading to the 'mad cow disease' tag.

Korsakoff's syndrome
The syndrome is a brain disorder usually associated with long-term heavy alcohol consumption.

HIV-related
HIV infection can cause a number of different problems with the brain that affect up to half of people with HIV.

Mild cognitive impairment
A relatively new term for those with some problems with memory who do not actually have dementia.

Rarer causes
Dementia can occur during the course of diseases such as Huntington's and multiple sclerosis.

Facts & Figures

According to forecasts there will be around 1,140,000 people with dementia in the UK by 2025 and over 2,000,000 by 2051.

WHAT IMPACT IS DEMENTIA HAVING ON SUFFERERS AND CARERS IN THE UK?

1,140,000 BY 2025

1 in 688 people under 65 have dementia
1 in 14 people over 65 have dementia
1 in 6 people over 80 have dementia

7 out of 10 people with dementia are living with another medical condition or disability

850,000 people in the UK live with dementia

1,340,000,000 HOURS

In 2013, unpaid carers worked with dementia for 1,340,000 hours, or over 150,000 years

43% of unpaid carers don't receive enough support

2/3 of dementia costs fall on people with dementia and their families - around £17.4bn a year

£90 per person is spent on research

<1/3 of dementia costs falls to the State

£30,000

£17.4bn

£90

£30,000

£0.1bn other

£5.8bn individual social care

£4.3bn healthcare

£4.5bn state social care

£11.6bn unpaid care

£17.4bn a year

Sources: Dementia UK second edition, www.alzheimers.org.uk; some figures have been rounded up.
The concept of class is still alive and kicking in Britain today

TOP DOG vs JOE PUBLIC

WHAT ARE THE BACKGROUNDS OF PEOPLE WHO INFLUENCE OPINIONS IN THE UK? THE MOST - POLITICIANS AND MEDIA PROFESSIONALS? WITH 7% OF THE PUBLIC AS A WHOLE GOING TO AN INDEPENDENT SCHOOL AND LESS THAN 1% GOING TO OXBRIDGE, IT SEEMS CLEAR WHO'S COMING OUT TOP DOG...

POLITICS
There are 650 MPs at Westminster. Out of this group...

Around 1/3 went to independent schools compared to 7% of the public as a whole

Nearly 1/4 attended Oxbridge compared to 1 in 100 of the public

Around 33% of Conservative MPs, 1/5 of Labour MPs and 1/4 of Liberal Democrats attended Oxbridge

Half of the Lords in the House of Lords attended independent schools, seven times more than the UK population as a whole

THE MEDIA
Includes professionals based on newspaper editors, columnists and broadcasters

54% of media professionals went to independent schools

45% of media professionals went to Oxbridge

38% of tabloid columnists attended independent schools compared to 45% of broadsheet columnists

26% of BBC executives went to an independent school, although 33% graduated from Oxbridge

PUBLIC SECTOR
Judges have the most advantaged educational background

Of senior judges, nearly 3/4 attended independent schools

Around 3/4 of senior judges went to Oxbridge

Senior armed forces officers are second only to judges in having the most advantaged educational background

Nearly 2/3 of senior armed forces officers attended independent schools

Police and Crime Commissioners and Chief Constables in England and Wales are more representative of the country

Just over 1/5 went to independent schools

Nearly 2/3 attended university but just 8% went to Oxbridge

BUSINESS

44% of those on the Sunday Times Rich List went to an independent school

43% of FTSE 350 CEOs attended a Russell Group University

29% on the Times Rich List did not attend a university

THE OTHERS

35% of the national rugby team and...

33% of the England cricket team attended an independent school

13% of the England national football team went to independent schools and 83% were educated in comprehensive schools

22% of pop stars attended an independent school, but 62% did not attend university