



Science scene!

This week is British Science Week with events and activities for all ages focusing on science, technology, engineering and maths.

This year's theme is growth, and one of the aims of the week is to encourage people from different backgrounds to get involved in the subjects and maybe consider them as a possible career path.

The News Shed is helping to celebrate the week in this edition, with two special pages of science, technology and space reports.

The Science Shed: page 3
The Space Shed: page 4

Shackleton's shipwreck found on seabed at last

Polar explorer Sir Ernest Shackleton's doomed ship *Endurance* has been found – 107 years after it sank in the Antarctic.

Shackleton and his team had been on a mission to cross the Antarctic from sea to sea via the South Pole but disaster struck in January 1915 when *Endurance* became trapped in pack ice in the Weddell Sea before they had even landed.

The ship became crushed by the ice and was holed, eventually sinking to the bottom of the ocean.

It led to a heroic escape by Shackleton and his entire team. The men camped on the ice until it began to break up and then made an amazing journey on the ship's small lifeboats.



The *Endurance* trapped in the sea ice

They made their way first to Elephant Island and eventually to South Georgia in the South Atlantic, a journey of 830 miles (1,330km) through stormy seas.

Previous attempts to find the shipwreck were foiled by the same pack ice which ruined Shackleton's expedition.

But this time the Falklands Maritime Heritage Trust, using a South African ice-breaking ship called *Agulhas II*, was helped by the lowest levels of sea ice since measurements began.

Remote-controlled submersibles carrying cameras were sent down and scientists were amazed to find the *Endurance* – sitting almost 10,000 feet (3,000m) down on the seabed – had suffered practically no further damage during its 107 years under the sea.

Shackleton began another Antarctic expedition in 1921 but when they stopped en route, back on the island of South Georgia, the explorer was taken ill and died in January 1922. He is buried on the island.

NEWS IN BRIEF

■ A scruffy copy of Harry Potter and the Philosopher’s Stone has been sold for thousands of pounds – after being bought for only 50p.

A Manchester businessman bought the book in a charity shop and only later discovered it was a rare first edition from a hardback batch of only 500 printed.

Despite being covered in a child’s scribbles, the book was bought at auction by an American collector for an incredible £15,500.

■ Visually-impaired skier Menna Fitzpatrick has become Britain’s most successful ever athlete at the Winter Paralympics.

The 23-year-old, who skis behind a guide, won four medals in South Korea four years ago and has now added a silver and a bronze medal in Beijing.

She is guided by Gary Smith, who stepped in at the last minute when Menna’s regular guide, Katie Guest, tested positive for Covid just before the Games started.

■ Radio 1 disc jockey Jordan North has raised more than £600,000 for Comic Relief with an exhausting rowing challenge.

He rowed 100 miles in five days on different stretches of canal between London and his home town of Burnley in Lancashire.


Donations were still coming in ahead of the Comic Relief television special, which takes place on Friday, March 18.

The NEWS Shed

■ The News Shed is a digital newspaper, produced weekly to inform, entertain and educate pupils and to provide resources for their teachers.

■ It is among a whole host of educational resources at: www.literacysshedplus.com

■ For contact details please see the website.



Big rise in pet rabbits being abandoned

An animal charity has reported a huge rise in unwanted pet rabbits. The RSPCA says some of its centres have been overwhelmed, with nobody coming forward to rehoming the rabbits. The number left at centres rose from 672 in 2020 to 859 last year, while the number of rabbits being abandoned shot up from 1,242 to 1,559. RSPCA rabbit expert Dr Jane Tyson said: “Despite rabbits often being perceived as an ideal ‘starter pet’ they actually have very complex needs and are one of the most neglected pets in Britain.”

Neighbours TV show scrapped

Popular Australian soap opera Neighbours is to end after 37 years on our television screens.

Originally shown only on Australian channels, the series became hugely popular in Britain when the BBC started showing it, with more than five million viewers a day watching.

Neighbours moved to Channel 5 in 2008 and that broadcaster has now decided to drop it. The Australian company which makes the show has not been able to find another British broadcaster, so will film its final scenes in June after almost 9,000 episodes.

Neighbours, based on the lives of people on Ramsay Street in Erinsborough, a fictional suburb of Melbourne, has launched the careers of some major showbusiness figures.

Pop star Kylie Minogue was a major figure in the early years of the show, while her on-screen boyfriend, and later husband, was played by singer and actor Jason Donovan.

Natalie Imbruglia is another pop star who came to fame in Neighbours while

Fact SHED

The big names who started out in Neighbours

■ **Kylie Minogue** played mechanic Charlene Mitchell, one of the show’s main early characters.

■ **Jason Donovan** played Scott Robinson, who married Charlene.

■ **Natalie Imbruglia** played Beth Brennan in the show for three years.

■ **Margot Robbie** was also in the show for three years, playing Donna Freedman.

■ **Guy Pearce** played lonely character Mike Young.

■ **Russell Crowe** played ex-convict Kenny Larkin in four episodes.

major Hollywood stars Guy Pearce and Margot Robbie had three-year stints in the show.

Even Russell Crowe, best known for his movie Gladiator, appeared in four episodes in his early 20s.

BRITISH SCIENCE WEEK 2022 MARCH 11-20

This week begins a 10-day celebration across the country of everything to do with science.

British Science Week promotes science, technology, engineering and maths with activities and events being staged around this year's theme of growth.

It is organised by the British Science Association, which says: "We welcome and support any type of organiser, from schools to community groups, from parents to large organisations. The resulting programme of events is a hugely varied mix."

The British Science Week website

features activity packs for all ages as well as listing events being staged and other ways to get involved.

And we at The News Shed are doing our bit with a page of the latest science and technology news below.

britishscienceweek.org

UN action on plastic

» 200 countries set to tackle pollution

A worldwide agreement is on the way to address the damage caused by plastic waste.

It is estimated that there are more than five trillion pieces of plastic in the world's oceans and another eight million tonnes of plastic is dumped in the seas every year.

Scientists say this is seriously harmful to wildlife and damages habitats.

Plastic can also get into the human food chain. It takes hundreds of years to break down and, when it does, tiny particles of plastic known as microplastics can be consumed by fish and other animals which can then be eaten by humans.

Now the United Nations is to work towards a treaty to tackle the plastic crisis. Almost 200 countries have agreed to find ways to reduce the waste.

The treaty could see countries introduce new laws on how plastic is made, used and disposed of.

Plastic pollution is a subject The News Shed has reported on regularly, and one campaigner told us that, while recycling plastic is important, one of the keys to solving the problem is not to use it in the first place.

Abbie Sellers runs a plastic-free shop in Ramsbottom, Greater Manchester, and campaigns on plastic waste. She told us: "Using less disposable plastic is the best solution, reusing what we have rather than throwing it away.

"Also, recycling isn't infinite. Once a piece of plastic has been recycled a few times, it can't continuously be made into another plastic bottle, for example, as it loses quality and changes its properties."



Black car or white car? Have both!

Are you fed up with the colour of your mum or dad's car?

If so, you might one day be able to travel in a car which changes colour at the touch of a button.

German car maker BMW recently unveiled a concept vehicle at a show in America which can instantly change from white to grey or black.

The BMW iX Flow is covered in a thin film containing a substance called E Ink which reacts to an electrical impulse, causing black pigment to be

'switched on' and white pigment to be 'switched off' or vice versa.

BMW say it is not just a gimmick and that it would have a practical use. A white car would reflect heat from the Sun on a hot day, keeping those inside cool, and a black one would absorb warmth on a winter's day.

The only problem is that the technology is currently too expensive to be used on normal cars.

But maybe by the time you are old enough to drive yourself...

Next Sunday, March 20, is the spring equinox and officially marks the end of winter in the northern hemisphere.

It is the day when there is an equal amount of daylight and darkness – the word equinox comes from Latin and literally means 'equal night'.

After Sunday, there will be an increasing amount of daylight each day. It happens as the movement of the Earth sees the northern hemisphere start to tilt towards the Sun.

In the southern hemisphere, of course, the opposite happens as their autumn begins and the days get shorter.

The autumn equinox in the northern hemisphere will come on September 23, when the hours of daylight start to get shorter again.

OUCH!

Three-tonne lump of space junk crashes onto Moon



» Mystery over source of debris

There will now be a new crater on the Moon after a huge chunk of 'space junk' crashed onto the surface.

As reported in previous editions of The News Shed, astronomers have been tracking the abandoned piece of an old space craft, believed to be a booster rocket weighing around three tonnes.

It finally crashed into the Moon last week, but experts believe it will not have had any adverse effect.

Even the strongest telescopes cannot see the crash site as it is on the far side of the Moon, but astronomers believe the impact would have created a small crater and a plume of dust.

Nobody is sure where the rocket part

came from. It would have been orbiting since being jettisoned by a space craft or satellite because it lacked the fuel to return to the Earth's atmosphere.

It was originally reported to have been from a space craft operated by Elon Musk's SpaceX organisation and then to have been from a Chinese mission, but both of those sources have denied they were involved.

There are thought to be more than 35,000 pieces of debris floating about in space and they have to be monitored to prevent collisions with satellites or manned missions.

The International Space Station recently had to manoeuvre twice to avoid being hit by items. On one occasion, the astronauts aboard had to climb into their capsules in case they had to make an emergency departure but a collision was averted.

A space port is set to be built on the most northerly point of the UK.

Local councillors have given the go-ahead for the launch site on the remote island of Unst in the Shetland Islands, more than 100 miles (160km) north of the Scottish mainland.

Unst is the most northerly of the Shetlands and, although it is one of the largest islands, it only has a population of around 600 people.

The plan is for the Saxavord Spaceport, named after the island's highest point, to have three launch pads to send satellites into space.

If licences are granted to the operators and the rocket manufacturers, the first launch could even take place later this year. That is expected to be a satellite to monitor weather conditions.

A tiny fragment from the meteorite which fell on the Gloucestershire town of Winchcombe last year has been sold at auction.

The 1.7 gram piece of rock, the size of a bean, was bought for £9,256, making it 120 times more valuable than a piece of gold of the same size, which would cost around £83.

Another piece sold for more than £20,000 but this was not as valuable in terms of cost per gram.

Scientists say the Winchcombe meteorite is the most important ever to fall in Britain, as it contains chemical clues from the start of the solar system.

A larger piece of the meteorite, weighing 100 grams, can be seen at the Natural History Museum.

WORD IN THE NEWS

A weekly feature focusing on a single word which has been in the news, looking at its meaning and where it came from.

SPACE

The start of so-called *space* tourism by private individuals, an increasing use of satellites and Nasa's plans to put astronauts back on the Moon in 2024 means *space* is rarely out of the news.

Definition

A continuous area or expanse which is unoccupied; the part of the universe outside the Earth's atmosphere.

Derivation

From the Latin *spatium*, meaning an expanse, and the French *espace*.

Examples

■ Businessmen Richard Branson and Jeff Bezos have started passenger flights into *space*.

■ The table took up too much *space* in the room.

■ The words on the page were neatly *spaced* out.

Synonyms

- Room
- Expanse
- Area

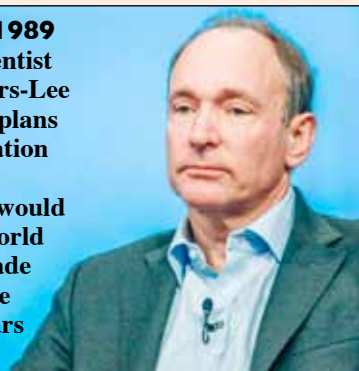
NUMBER IN THE NEWS

59

The number of weeks the song Heat Waves by British band Glass Animals was in the charts before reaching No.1 on the Billboard Hot 100 in the United States – the longest ever wait.

This WEEK in HISTORY

March 12, 1989
 Computer scientist Sir Tim Berners-Lee submitted his plans for an information management system which would become the World Wide Web, made available to the public two years later.



March 13, 2013

Jorge Mario Bergoglio, the Archbishop of Buenos Aires in Argentina, was elected as the new pope, head of the Roman Catholic Church.

As Pope Francis, he became the first pope from South or North America, the first from the southern hemisphere and the first from outside Europe since Pope Gregory III almost 1,300 years earlier. He took the name Francis in honour of Saint Francis of Assisi.



March 15, 2019

More than a million children around the world refused to go to school in protest at a lack of action over climate change.

The School Strike for Climate, also known as Fridays for Future, was inspired by the campaigning of Swedish schoolgirl Greta Thunberg, who had made similar protests a year earlier at the age of 15.

March 14, 1997



Simone Biles was born in Columbus, Ohio. She would go on to become one of the most successful and celebrated gymnasts of all time.

She has won no fewer than 32 medals at Olympic Games or World Championships, sharing the record with former Soviet Union gymnast Larisa Latynina.

At the most recent Olympic Games, in Tokyo last year, Biles withdrew from some events after suffering from what gymnasts call “the twisties”, a temporary loss of balance and awareness of where she is in complicated aerial exercises.

Medal SHED

Simone Biles	Larisa Latynina
Olympic Games	
4.....gold.....	9
1.....silver.....	5
2.....bronze.....	4
World Championships	
19.....gold.....	9
3.....silver.....	4
3.....bronze.....	1
32.....Total.....	32

March 16, 1978

The supertanker Amoco Cadiz ran aground and broke up on rocks in the English Channel, causing what was at that time the worst oil spill in maritime history. The huge ship's entire cargo of 220,000 tonnes of oil was spilled into the sea.

March 17

St Patrick's Day, celebrating the patron saint of Ireland, is marked with public holidays in the Republic of Ireland and Northern Ireland. It is also celebrated by emigrant Irish communities around the world, particularly in New York.

March 18, 1965

Cosmonaut Alexei Leonov became the first man to make a spacewalk, when he left through an airlock and spent 12 minutes outside his spacecraft Voshkod 2.



MAX SPEED

» New deal for world champion Verstappen

Max Verstappen is on top of the world as the new Formula 1 motor racing season is about to start.

The 24-year-old Dutch driver is the reigning world champion after a controversial end to last season.

And now Verstappen, whose father Jos was also a Formula 1 driver, has signed a new contract with his Red Bull team. It will keep him at the Austrian outfit until 2028 and is said to be worth up to £40 million a year.

“I love this team and last year was simply incredible,” said Verstappen.

The Dutchman won his first Formula 1 world championship in dramatic circumstances at the final race of last season in Abu Dhabi.

He and British driver Lewis Hamilton were level on points going into the

race, which meant whoever won the race would be the champion.

Hamilton was leading on the very last lap but when racing resumed after a period behind a safety car Verstappen was able to make the most of newer tyres to pass his rival.

Hamilton’s Mercedes team insisted the re-start did not follow the right procedures but, although the sport’s governing body has since removed the race director, it refused to overturn the result.

It denied Hamilton a record-breaking eighth world championship and the controversy was said to have left him disillusioned but the 37-year-old eventually decided to continue racing this year.

Mercedes will have an all-English driver line-up this season with Hamilton’s former team-mate, Finnish driver Valtteri Bottas, replaced by George Russell.

Fact SHED

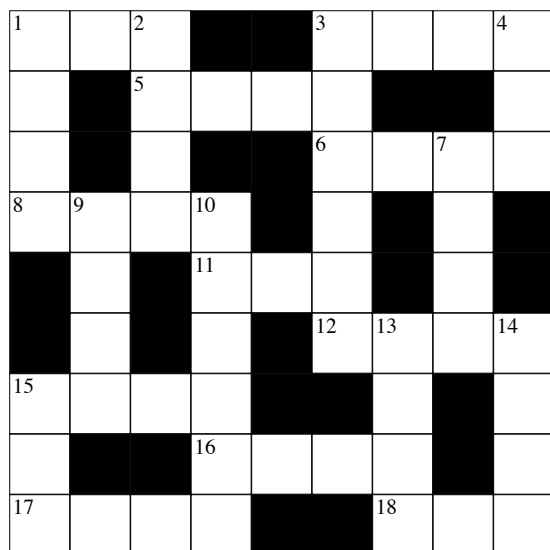
Grand Prix calendar 2022

Date	Grand Prix	Circuit
Mar 20	Bahrain	Sakhir
Mar 27	Saudi Arabia	Jeddah
Apr 10	Australian	Melbourne
Apr 24	Emilia Romagna	Imola
May 8	Miami	Miami Gardens
May 22	Spanish	Barcelona
May 29	Monaco	Monaco
Jun 12	Azerbaijan	Baku
Jun 19	Canadian	Montreal
Jul 3	British	Silverstone
Jul 10	Austrian	Spielberg
Jul 24	French	Paul Ricard
Jul 31	Hungarian	Hungaroring
Aug 28	Belgian	Spa
Sept 4	Dutch	Zandvoort
Sept 11	Italian	Monza
Oct 2	Singapore	Marina Bay
Oct 9	Japanese	Suzuka
Oct 23	United States	Austin
Oct 30	Mexico	Mexico City
Nov 13	Brazilian	Interlagos
Nov 20	Abu Dhabi	Yas Marina

Team and driver line-ups for 2022

Alfa Romeo	Guanyu Zhou, Valtteri Bottas
AlphaTauri	Pierre Gasly, Yuki Tsunoda
Alpine	Fernando Alonso, Esteban Ocon
Aston Martin	Sebastian Vettel, Lance Stroll
Ferrari	Charles Leclerc, Carlos Sainz Jr
Haas	Mick Schumacher, Kevin Magnussen
McLaren	Daniel Ricciardo, Lando Norris
Mercedes	Lewis Hamilton, George Russell
Red Bull	Max Verstappen, Sergio Perez
Williams	Nicholas Latifi, Alex Albon

CROSSWORD



ACROSS

- 1 & 3 down** RAF aerobatic team (3, 6)
- 3** Largest mountain range entirely in Europe (4)
- 5** Slightly open (of a door) (4)
- 6** Reddish-brown coating on iron (4)
- 8** Focusing part of camera or eye (4)
- 11** Botanic gardens in west London (3)
- 12** Badger’s home (4)
- 15** Computer language for creating web pages (1,1,1,1)
- 16** Young sheep (4)
- 17** Untidy place where soldiers eat? (4)
- 18** Finish (3)

DOWN

- 1** Move by turning over and over (4)
- 2** Daybreak (4)
- 3** see 1 across
- 4** Use a chair; command to a dog (3)
- 7** Black powder in a chimney (4)
- 9** To the right on a map (4)
- 10** Abilities (6)
- 13** River that rises in Czech Republic and flows across Germany to North Sea (4)
- 14** Cane or natterjack amphibian (4)
- 15** That man (3)

Ask your teacher to find the solutions online with the reading comprehension answers