BBC WHY LIFE ON EARTH WASN'T AN ACCIDENT





What China's pioneering lunar mission means for the future of space exploration

BAD CAREERS ADVICE

Is it putting young women off working in science?

MIND BLIND

Inside the condition that leaves you with no imagination

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How modern life is changing the way we speak

THINGS WE LEARNT THIS MONTH

HUMANS HAVE 35 COMMON FACIAL EXPRESSIONS

There are just 35 facial expressions that are commonly understood across almost all cultures – 17 of which express happiness, while just one suffices for disgust.
Cognitive scientists at Ohio State University typed over 800 words that describe feelings, in five languages, into the most popular search engines on five continents, and analysed the 7.2 million resulting images.

TERMITES BENEFIT RAINFORESTS

Here's something to chew on: termites protect tropical rainforests from drought, a new study in Hong Kong has discovered. The presence of termites speeds up the process of leaf litter decomposition, leading to soils that are moister and richer in nutrients during dry spells.

OFFICIAL: GM OPPONENTS LACK UNDERSTANDING

Studies in the US, France and Germany last year found that the people who most strongly oppose GM crops have the poorest scientific understanding – yet rate their own knowledge the highest.

Those who performed best in tests of basic scientific knowledge were the least likely to object to GM crops.

ASTRONOMY

HUBBLE SPIES ON THE NEIGHBOURS

This image of Messier 33, one of our nearest galactic neighbours, was snapped by the Hubble Space Telescope during a panoramic survey. Also known as the Triangulum Galaxy, Messier 33 is one of the most distant objects that's visible with the naked eye (in favourable conditions). It's also one of the three large galaxies in our Local Group, the other two being our own Milky Way and the Andromeda Galaxy. Like the Milky Way and Andromeda, it's a spiral galaxy, though it lacks a central bulge, and is much smaller, at 60,000 light-years across (compared to 100,000 for Andromeda and 200,000 for the Milky Way).

The Triangulum Galaxy is a hotbed for star formation, with a new solar mass star forming within it roughly every two years. It

was this constant star-formation activity that inspired the Hubble team to image the galaxy in as much detail as was possible.

The end result is an image measuring 34,372 by 19,345 pixels – that's a staggering 665 million pixels, second in size only to Hubble's 2016 image of the Andromeda Galaxy. Within the image, around 10 to 15 million individual stars can be discerned, though even that is just a small fraction of the 40 billion or so stars believed to make up Messier 33.

It is hoped that the new image, combined with existing images of the Milky Way, the Andromeda Galaxy and the Large Magellanic Cloud, will help astronomers improve their understanding of how stars form and how they evolve over time.

