



CLOSING IN ON A CURE FOR MIGRAINES

Science Focus

The secrets of
YOUR SECOND BRAIN

Why we don't need
ROBOTS THAT LOOK LIKE US

**THE NEXT GENERATION OF SPACE TECH
IS HERE AND IT'S GOING TO TAKE US TO
PLACES WE'VE NEVER SEEN BEFORE**

INTO THE UNKNOWN



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#382 SEP 2022
UK 95.50

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SPACE
DESPITE DELAY, NASA'S ARTEMIS PROGRAMME IS SET TO PUT HUMANS BACK ON THE MOON

As *BBC Science Focus* went to print, NASA had made a last-minute delay to the launch of Artemis 1 – the first of three missions that will culminate with humans walking on the Moon for the first time since 1972.

With an imminent launch still on the cards, the uncrewed mission will see the first test of the Space Launch System (SLS) rocket and the Orion spacecraft.

Orion will detach from the SLS after launch, perform an orbit around the Moon, and then finally splash down in the Pacific Ocean after around six weeks – the longest time any spacecraft built for astronauts has spent in space without docking to a space station.

Following Artemis 1, the space agency plans for Artemis 2 to take four astronauts on a flyby of the Moon in 2024. And then in 2025, humans are scheduled to set foot back on the lunar surface with the Artemis 3 mission.

1. Commander Moonikin Campos is a mannequin being used to measure the effects of acceleration and vibrations in space on future human astronauts. Named after Arturo Campos, an engineer who helped to save the Apollo 13 crew in 1970, the mannequin is pictured here in the commander's seat of Orion wearing an Orion Crew Survival System flight suit – the same uniform that will be worn by the Artemis 2 and 3 crews.

2. Here, the Orion spacecraft can be seen mounted atop the SLS (Space Launch System) rocket – inside High Bay 3 of the Vehicle Assembly

Building at Florida's Kennedy Space Center.

3. A pair of anatomically correct torso dummies, named Helga and Zohar, are positioned on Orion in order to study how radiation affects the human body during lunar flight. They are made of materials specifically designed to mimic bones, soft tissue and organs.

4. Following a 10-hour, 6.4km journey from the Vehicle Assembly Building, the SLS rocket and Orion spacecraft are in position on top of a mobile launcher on the Kennedy Space Center's Launch Pad 39B.

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