

On December 15 2015, Tim Peake became the first British astronaut to ever visit the International Space Station. He launched on the Soyuz rocket with crewmates Tim Kopra and Yuri Malenchenko. His mission turned out to be an eventful and very busy six months in space! In the first month, Tim conducted a spacewalk to repair the Station's power supply. Other highlights of his mission saw him drive a rover across a simulated Mars terrain from space and he helped dock two spacecraft. Tim took part in over 250 scientific experiments during his mission. His Principia mission also focused on educational outreach, engaging more than 1.6 million schoolchildren across Europe in over 30 projects during his mission. We are absolutely delighted that Tim is able to join us today for a question and answer session.

Question: Welcome Tim, to begin with please could you tell us a little about how astronauts are selected to go into space?

Of course I can. You see, living and working in space is totally different to what it is like on Planet Earth. There are several aspects to astronaut training which are really important in order to make sure the most suitable people are selected for missions. One aspect of our space training takes place inside caves. Caves are fantastic for providing an enclosed, stable climate which can put recruits (people who want to be astronauts) to the test. Selection is based upon your ability to work in small groups, your ability to work under pressure and your level of fitness. You must also show a strength of character to work in isolation for an extended period of time as many people would simply miss their family and friends too much.

Question: Brilliant, thank you, Tim. Our next question is from Paul in Portsmouth. He would like to know: how do you exercise in on board the ISS?

It is really important to exercise whilst on board the space station in order to keep fit. We use special vacuum cylinder controlled gym equipment and exercise bikes to exercise each day. You may have also seen images from my time on the International Space Station where I was strapped with a bungee to a special space treadmill in order to complete the London Marathon. Surprisingly, it was much harder to complete the London Marathon in space, even with weightlessness! The straps put pressure on my shoulders whilst more blood flow was required to all parts of my body to counteract the weightlessness. Being an astronaut certainly requires high levels of fitness!

Question: That's Amazing Tim. Really? They have treadmills in Space! Right, I think we have time for one final question if that is ok? (Tim nods his head and smiles) Tim, the children of Year 5 at Park Gate Primary School would like to know how astronauts sleep whilst on board the ISS because of the lack of gravity?

(Laughs) I get asked that question a lot! You see as difficult as it may seem, sleeping on the ISS is really easy and we can sleep in any position really. We have small private chambers inside the ISS which allow us to close off and rest after a hard day's work. Inside the chamber there is a set of straps and a special space sleeping bag which we zip ourselves into in order to stop us floating around and bumping our heads! Astronauts often sleep in what you and I would call a 'upright' position as it takes up less floor space within the space station and there is then more room in the living quarters for us to move around.

Thank you Tim. It has been wonderful to talk to you and hopefully we can broadcast another live Q and A event next month. Thanks for watching everyone!