GCSE



C700U20-1A



WEDNESDAY, 3 NOVEMBER 2021 – MORNING

ENGLISH LANGUAGE – Component 2 19th and 21st Century Non-Fiction Reading and Transactional/Persuasive Writing

RESOURCE MATERIAL FOR USE WITH SECTION A

PMT

Tim Peake was the first British astronaut to fly to the International Space Station and take part in a spacewalk. He wrote about his experience in his book, 'Ask an Astronaut'.

My first ever walk in space was the most vivid memory I have of my flight into space. Orbiting at over 17000 miles per hour, high above planet Earth, it felt unreal to work in such perilous conditions. At any moment I could have been hit by a hurtling micro-meteorite, but it was worth the risk to witness the widescreen beauty of Earth, as few in history have done.

At 12.55pm on Friday 15th January 2016, my fellow astronaut, Len Kopra, and I got the message from Mission Control back on Earth to leave the space station to repair a unit on a faulty solar panel. Any nerves that I had before my spacewalk were dealt with by making sure that I was completely prepared for what I was about to do and the moment I felt any anxiety disappear was when Len opened the hatch to space. Night was approaching, the sun was low on the horizon and I remember pulling on my pressurised space gloves and thinking, 'Finally, time to get to work!'

Carrying a bag of tools each, we set off to do the repair work– a simple task back on Earth for any electrician. The only difference? We were setting foot into the vacuum of space. Leaving the safe haven of the International Space Station, we were about to enter an environment where temperatures are so extreme they can vary from 200 degrees Celsius in sunlight to minus 200 degrees at night; one minute it is bright daylight and the next minute it is pitch black. Worse still, if something went wrong you could find yourself floating away into space, 250 miles above the Earth.

Our task was to replace a faulty unit on one of the solar panels at the edge of the space station. It meant the space station was down to one-eighth of its electrical power, so it was an important job to restore the space station to full capability.

Len and I had to get to the panel safely but rapidly. Timing was critical to this spacewalk and the only way to replace the faulty unit safely was to wait until the temperature dropped when the sun went down. Len and I made good progress once we left the space station and we were in position by the solar panel ten minutes ahead of schedule. As we approached sunset, Mission Control told us to raise the visors on our space helmets, ready for the rapid change into the blackness of night.

During my spacewalk by far the best part was a feeling of awe and reverence during those precious few moments while waiting to get to work. As day changed into night, it was like having a front-row seat in nature's own widescreen cinema. I could turn in any direction, one minute marvelling at how fragile and beautiful Earth looked as it slipped gracefully into shadow, the next minute seeing only the vast blackness of space. Without gravity, and not feeling the weight of my spacesuit, I felt completely detached – utterly removed from Earth, civilisation, the space station. I had the sensation of being a tiny spectator in an immeasurably vast universe. It was the most astonishing and humbling experience of my life.

During the spacewalk Len and I had been working on separate tasks, but we were not too far away from each other when it became clear that his spacesuit had developed a fault. Water had begun to enter his helmet and Mission Control told us to get safely back inside the space station. Fortunately, we had already completed the task of restoring the space station back to full power, and the spacewalk had been declared a success.

PMT

It wasn't until much later that evening that I realised how much interest there had been in the spacewalk and the amount of support I had received from people back home. Messages of encouragement had been flooding in during the day. There was even a tweet from Sir Paul McCartney: 'Good luck – we're all watching. Wishing you a happy stroll outdoors in the universe.'

It was overwhelming to achieve a personal dream – to fly in space and be the first British astronaut to walk in space. It was also extremely humbling to know that it had also meant so much to so many people. I went to sleep that night a very proud Briton.

