

Space
KS2
Thursday - Humanities

Astronauts in Space

There are many changes that the human body goes through in space and the International Space Station is the perfect environment to monitor these changes. Many of Tim's activities on the ISS were tests on his body.

Pre-flight, astronauts need to be sure that they do not have any colds or infections that they could take into the International Space Station. They also see flight surgeons who make sure they do not have any medical conditions that would require treatment so far away from home. There is some medical equipment on board but astronauts would need to be flown home if they had a major health issue.

In microgravity, astronauts float around and therefore there is no load on their body. Their bones and muscles decondition and they need to exercise daily on the space station to counteract the effects of space. Tim trained for two hours per day on the ISS to counter the effects of gravity and he even completed the London Marathon up there.

Astronauts are also prone to motion sickness and kidney stones. Their sleep is often disturbed as the circadian rhythms are disrupted. Fluid shifts mean that they feel as if they have a head cold and this also affects their sense of smell and taste, and sometimes their eyesight.

Astronauts can grow by up to two inches while in space because the lack of gravity means the spine will expand and relax more easily.

Decide if these statements are true or false.

1. When you go to space you may find that you get taller.
2. You may feel sick for your first few days in space.
3. When you go to space your thumbs fall off.
4. In Space your eyeballs change shape.
5. In space your bones become weaker.
6. When you go to space you may find that your ears turn purple.
7. When you go to space you grow hair all over your body.
8. When you go to space your face gets puffy.
9. You can't poo in space!
10. In space you are more likely to get kidney stones.