Can we live in Space?

SPACE scientists are continually carrying out experiments to find out what the effects of space are on the human body. This knowledge will be vital for the health of astronauts on the long journeys to Mars planned for later this century.

Astronauts of many different nationalities may stay on space stations for several months. Like Helen Sharman, they find that it's not quite the same as life on Earth.

Which way is up?

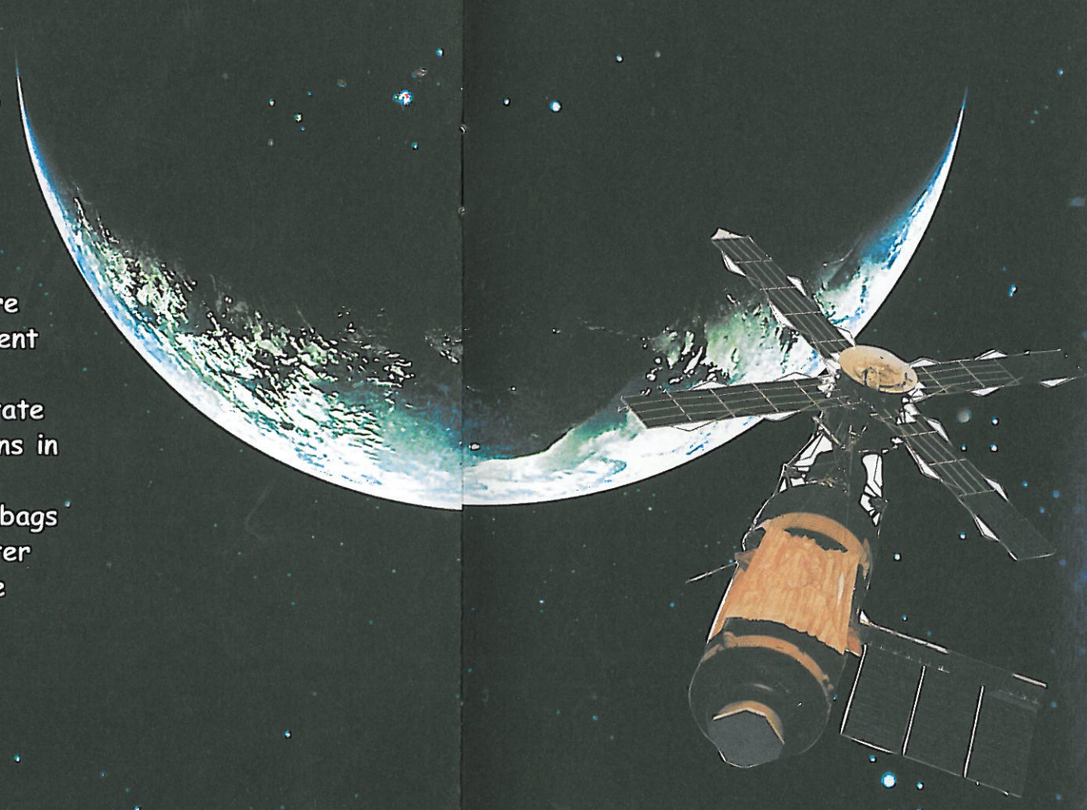
The floors and ceilings on Mir are painted in different colours to help astronauts orientate themselves. Cabins in spaceships have vertical sleeping bags - it doesn't matter which way you lie when there's no gravity pulling you down.

Working out

Weightlessness is bad for the bones and muscles, so space-farers must strengthen them by long periods of exercising - either on a moving walkway or an exercise bike.

Space sickness

Some astronauts spent more than a year on Mir, but living in space is not all plain sailing. Nearly half of all space-farers suffer from 'space sickness' - which is similar to car sickness - when they first experience weightlessness. Most, though, soon adapt to the new environment.



Space food

The food has to last for several months, so it is mostly canned or dried. Hot water is added to packets of dried soup or vegetable puree. By rolling up one end of the packet, liquids are drunk from the other end through a spout.

Spin-offs from space travel

Almost every home has benefited from the new technology used to send people into space.

Did you know that all of the following things were invented as part of the space programme?

Computerised bar codes for labelling items

Dried food for easy storage

Teflon for strong clothing and non-stick pans

Cordless power tools for use without mains electricity

Smoke detector as a safety precaution