

KS1 Science: Space

How do we explore space?

CHILDREN: Three... Two... One... Lift off!

MADDIE MOATE: Humans have always been fascinated by space, but for most of our history travelling into space was just an impossible dream.

CHILD: Until 1957.

MADDIE: That's right. In 1957 we finally had the technology to make that dream a reality. The first thing humans sent into space was this - a satellite called Sputnik 1. The next challenge was to send a person into space. Which happened in 1961.

CHILD: I wonder what it felt like being the first person in space?

MADDIE: Then, in 1969, a huge rocket called Saturn 5 began the long journey to the moon. The rocket looped around the Earth twice to build up enough speed then set off across space. And three days later two astronauts called Neil Armstrong and Buzz Aldrin became the very first people to walk on the surface of the moon. But exploring space didn't stop with the moon. Machines with no people in them have been sent to explore planets in the solar system, including Venus, Mars and Mercury. There's a huge spacecraft that's been orbiting the Earth for over 20 years. It's called the International Space Station. The astronauts and scientists on board the space station feel weightless - and anything, that isn't stuck down can float away.

CHILD: Imagine trying to eat pizza that's floating in space!

CHILD: What else do the astronauts do up there?

MADDIE: Let's ask our expert...

DR BECKY: Hi, I'm Dr Becky and I am a space expert. Now, astronauts on-board the International Space Station sadly aren't just on a holiday in space. They have very important jobs to do running scientific experiments. Like studying what happens to the human body when it's weightless in space for too long, or studying the Earth from above, or even testing out new materials that we could use to help improve life here on Earth. All of these experiments will also help us for any future space exploration missions that take us beyond Earth.

MADDIE: The machines we send into space that orbit the Earth, called satellites, have changed our lives in the last 60 years. They take pictures of the Earth and other planets so we can learn more about them and see what they look like. They help us know about the weather, they make our TVs work and they let us talk to each other. They even stop us getting lost.

All this space exploration is having an effect and the space around Earth is getting crowded. There are now thousands of satellites circling the Earth, sending back information and helping us in lots of different ways.

[To the children] What are you up to?

CHILD: We're making space art.

MADDIE: Space is huge and our exploration of it is only just beginning. I wonder where we'll travel and what we'll discover next.