

SCIENCE OF SPACE

For years and years, scientists have studied outer space. At first, they only observed it from a distance with **telescopes**, or **tools that help us see distant** objects, because nobody thought it was possible to get there! Eventually, with advances in technology, **astronauts** have been able to travel to outer space and see it for themselves. Read all the information at this table to find out more about outer space and how scientists are able to send people there!

What is outer space?

What we know of as **outer space** begins where the Earth's **atmosphere**, or **shell of air around our planet**, disappears. Usually people think of outer space as anything beyond **100 kilometers, or 62 miles, above sea level**. As you get farther and farther away from Earth's surface, the temperature gets colder and colder, and oxygen starts to disappear. In fact, there is **no air** in outer space at all! And if you were to go very far away from Earth into what is called **empty, interstellar space**, it is so cold that it is **3 Kelvins—the coldest anything can ever get!**

