

The Space Shuttle

This text is adapted from an original work of the Core Knowledge Foundation.

A group of American astronauts visited the moon on a rocket ship called Apollo 11 in 1969. Interest in manned space exploration soared after Apollo 11. Other astronauts went to the moon. But scientists were also interested in exploring other parts of space beyond the moon. It was very expensive and took a lot of time to build and send spaceships into space. When Apollo 11 returned from space, it landed in the sea. It was not able to land safely on the ground, so this type of spacecraft always had to land in the sea. Once it landed in the sea, this kind of spacecraft could not be used again.

In 1981, a reusable spacecraft, called a space shuttle, was built. It was able to fly up into space and then zoom back down to Earth. When it returned to Earth, the pilot was able to land the spacecraft on a runway almost like an airplane. It glided down from space and landed on a runway, but it had to be a very long runway.



A space shuttle lifts off

The space shuttle was flown back into space again and again. It shuttled back and forth between Earth and space. That is why it was called the space shuttle.

The image here shows the launch of a space shuttle. The space shuttle itself is the white part that looks like a jet plane. The other parts are booster rockets. The booster rockets helped the space shuttle get off the ground. They helped the space shuttle overcome Earth's gravity. Once the space shuttle was up into space, it dropped the booster rockets because it no longer needed them.



A space shuttle in orbit above Earth

In the thirty years between 1981 and 2011, different space shuttles carried astronauts up into space on many missions. The space shuttle was also used to bring research equipment and tools into space. The astronauts did many experiments to find out more about space.

Scientists were especially interested in learning about what effect the lack of gravity would have on humans and other living things.

The space shuttle was also used to help build an amazing space station. Astronauts could live at the space station for months at a time. Often, the space shuttle carried supplies back and forth from Earth to the space station. It also provided a ride home to Earth when it was time for the astronauts to return.

The last space shuttle mission took place in July 2011. NASA scientists and Americans were proud of everything the astronauts had accomplished in thirty years. With the end of the space shuttle missions, NASA is planning other ways to explore space. Those plans include launching unmanned probes and satellites. NASA scientists hope to learn more about the moon's gravity and are even talking about trying to explore asteroids!



A space shuttle comes in for a landing.