Interacting with Space

By David Jakstas

Space Exploration: The Farmer's Best Friend?

"I won't do it!" Sydney says aloud.

Her dad passed her room earlier. Now he's back to ask, "What's the issue?"

Sydney doesn't want to write about space exploration. It doesn't match her vision of an interesting topic. She wants to write about her band. Her teacher says that isn't allowed.

"Space exploration doesn't matter to me," she says.

"It should," says Dad. He explains how space exploration changed common farming methods. "Farmers use GPS to harvest crops. Weather scientists' instruments and satellites measure rainfall for planting. All of those tools are also used to study Earth from space! Those are just a few ways that space exploration helps us run our farm," says Dad.

Space Action!

Space exploration must never be banned.
We continue exploring outer space, and Earth's land.

We're building huge rockets and strong satellites
that orbit the Earth, in both daytime and night.

Scientists developed a useful equation,
helping to create an amazing Space Station.

Satellites send data about weather and tides
to inform us of rain, or will it be dry?

Satellites give us phones, TV, and navigation,
and the Internet, too. Thanks, space exploration!

Space Debris

Picture Earth the way an astronaut sees it from space. It looks like a big, blue marble because of its large oceans. But look closer. Millions of pieces of space debris are orbiting Earth. Much of the debris is space junk. It was brought there by past human activity. Space junk includes bits of spacecrafts and satellites.

It's true that most space junk is small. However, thousands of pieces are bigger than a softball. Scientists say the space debris travels at speeds of up to 17,500 miles per hour (28,000 kph). Scientists track space debris to help predict and stop collisions.

Space Junk

According to NASA, the following space junk orbits the Earth (numbers are approximate):

- 23,000 pieces larger than a softball
- 500,000 pieces the size of a marble or larger (up to 0.4 inches, or 1 cm)
- 100 million pieces about .04 inches (or 1 mm) and larger
- Millions more pieces that are even smaller