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## Chapter 1 HEADING TO SPACE

"3, 2, 1."
Blast off!
Engines roar.
The ground shakes.
Fire burns.
Smoke builds.
A rocket takes off.
It flies high.
People watch.
The rocket gets smaller.
It is going to space.

Something is inside. It is a *spacecraft*. A big job waits. The craft will go far. It will take ten years. Then it will catch a *comet*.

### Chapter 2 WHAT ARE COMETS?

Our *solar system* is old. Scientists have an idea. This is called a *theory*.

It was long ago. There was a cloud. It was huge. The cloud spun around. Rocks were inside. Dust, gas, and ice were too.

Our sun was made. Planets were next. Then came comets. They came from what was left.

#### THE SCIENCE OF COMETS

Scientists believe that our solar system was created 4.6 billion years ago.

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#### Famous Comets

#### **Comet McNaught**

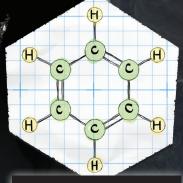
It was discovered in 2006. This is one of the brightest comets that has been found. In some places, people could see it without a telescope during the day. Comet McNaught takes 92,600 years to orbit the sun.

# Chapter 3 SECRETS OF COMETS

Comets are special. Many think so. They hold clues. We can learn things. How did life begin?

Some have an idea. Comets flew in space. They carried *carbon*.

Carbon is in all living things. It is needed for life. People have it. Animals do too. Even plants have it.



**Carbon molecule structure**